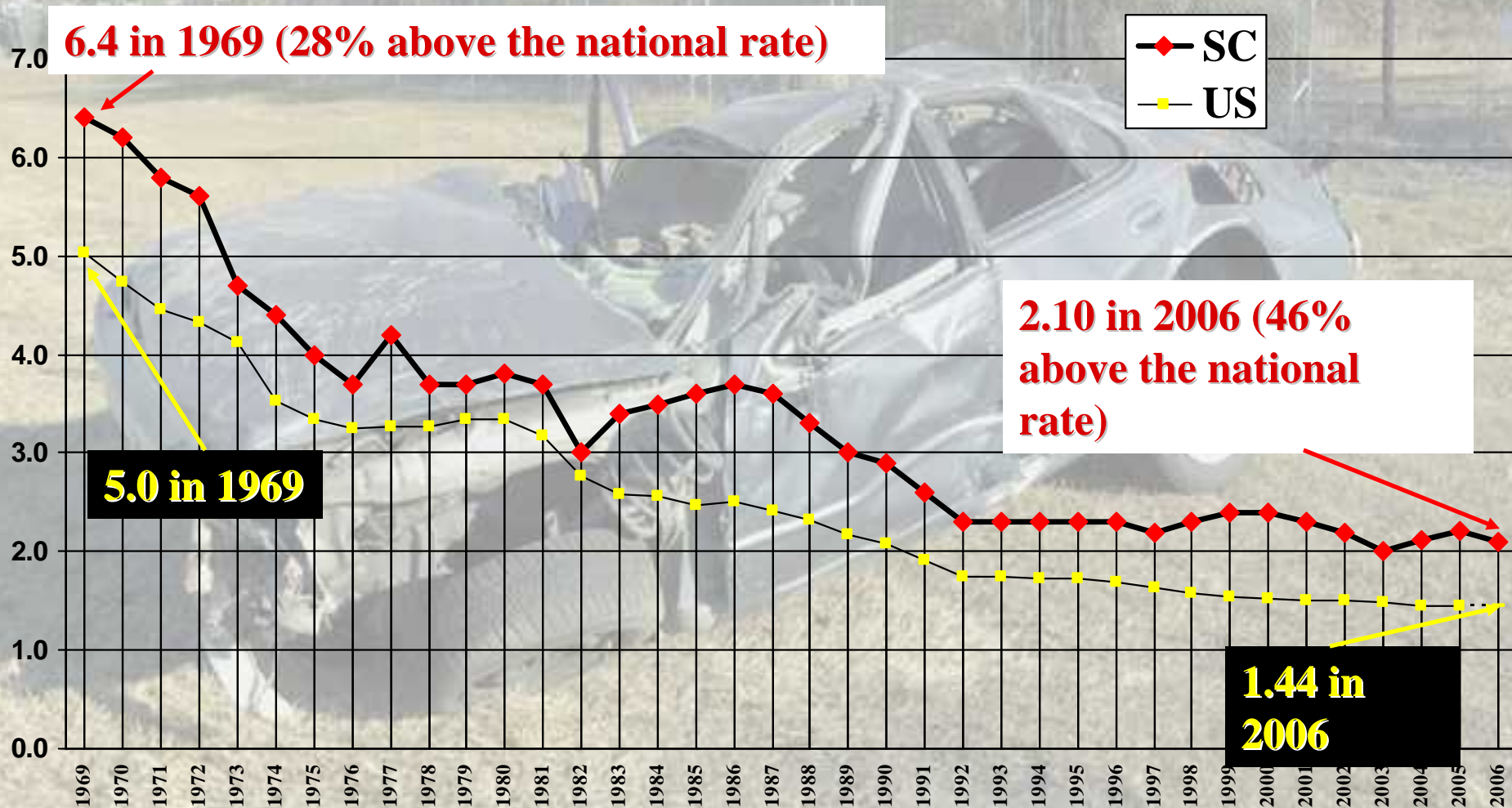




# **Strategic Highway Safety Plan for South Carolina**

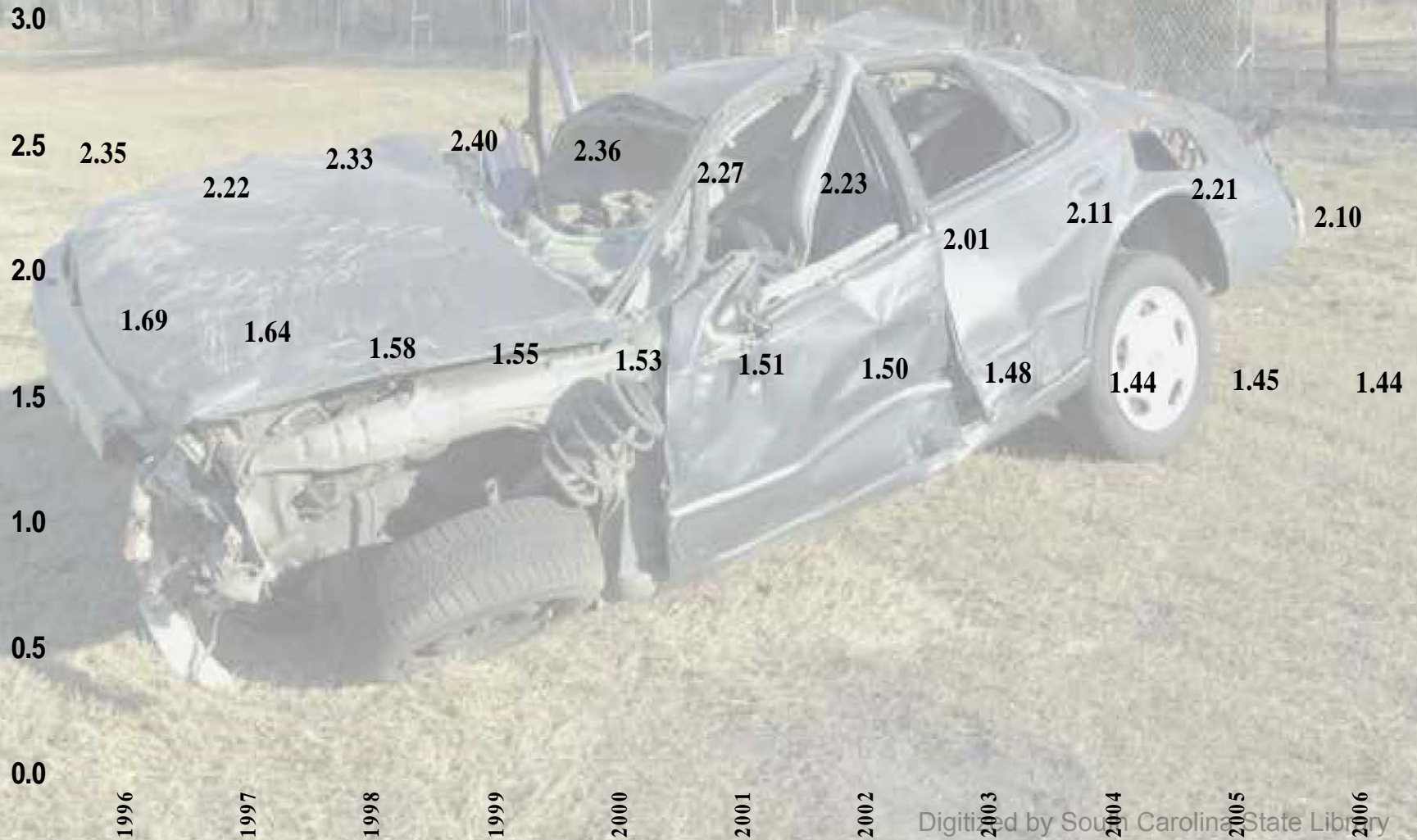
# South Carolina vs US Mileage Death Rate

(Traffic Deaths per 100 million vehicle miles traveled)



# South Carolina Mileage Death Rate

## Traffic Deaths per 100 million Vehicle Miles Traveled

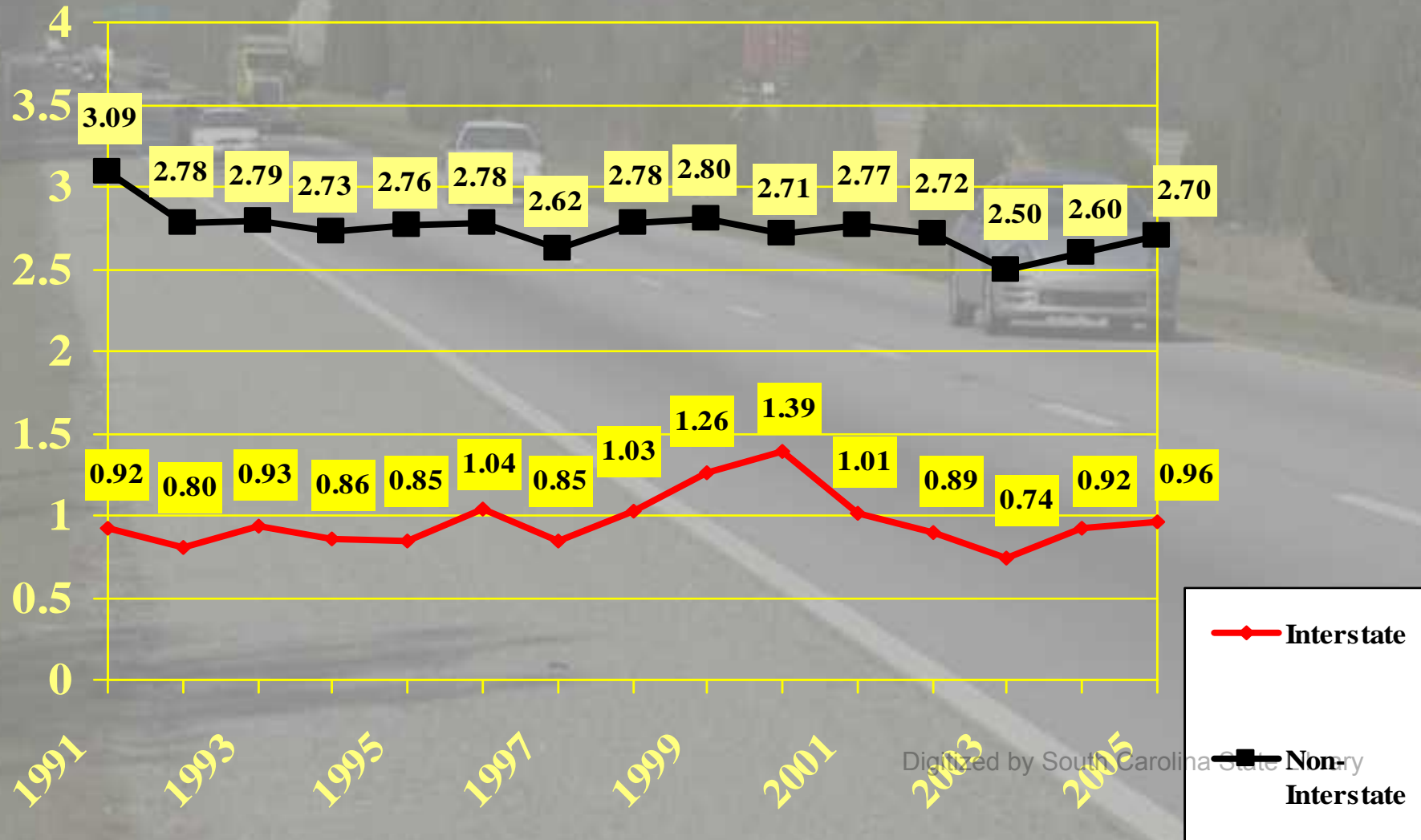




# South Carolina Mileage Death Rate

## Interstate vs Non-Interstate

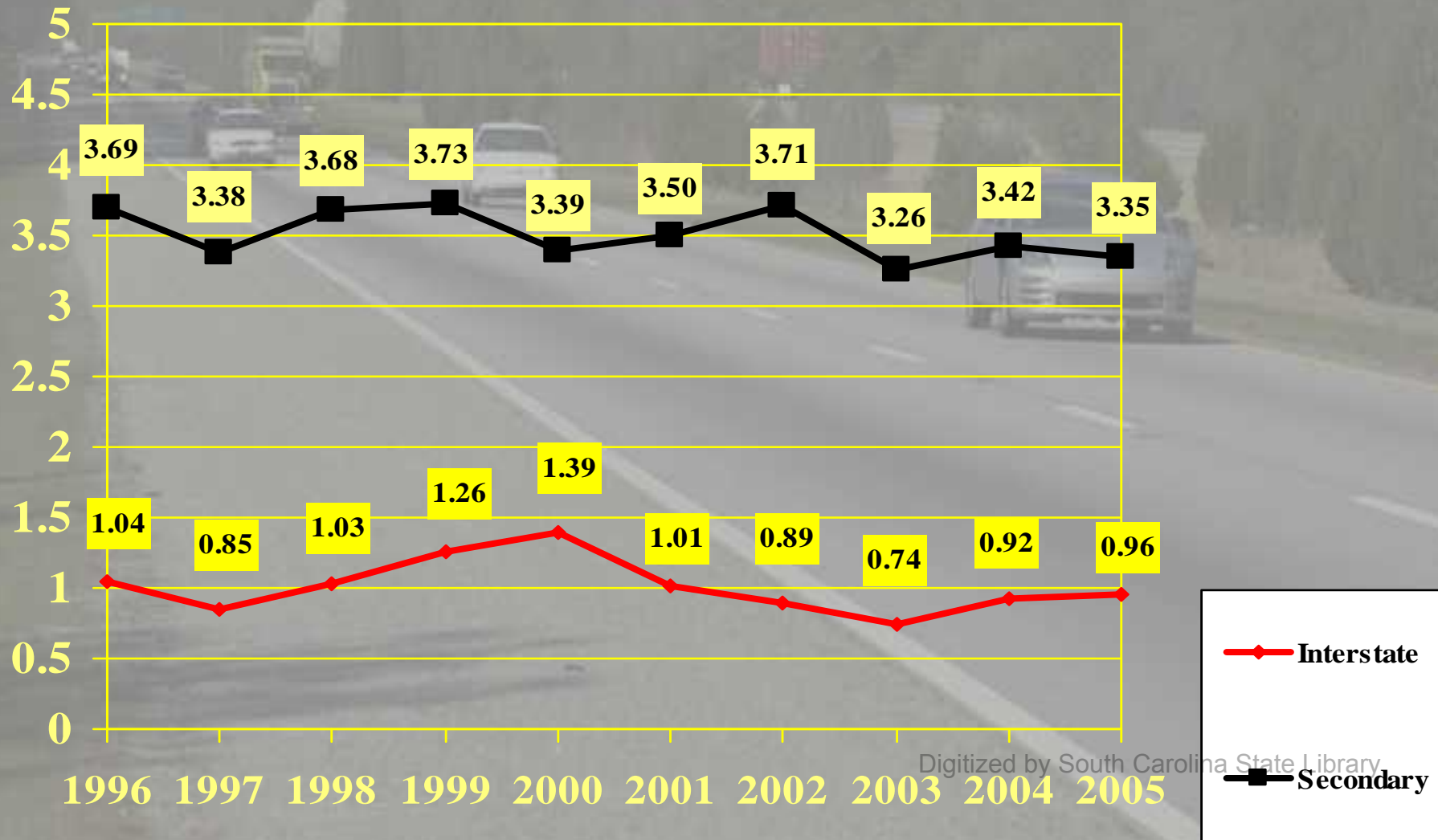
(per hundred million vehicle miles of travel)



# South Carolina Mileage Death Rate

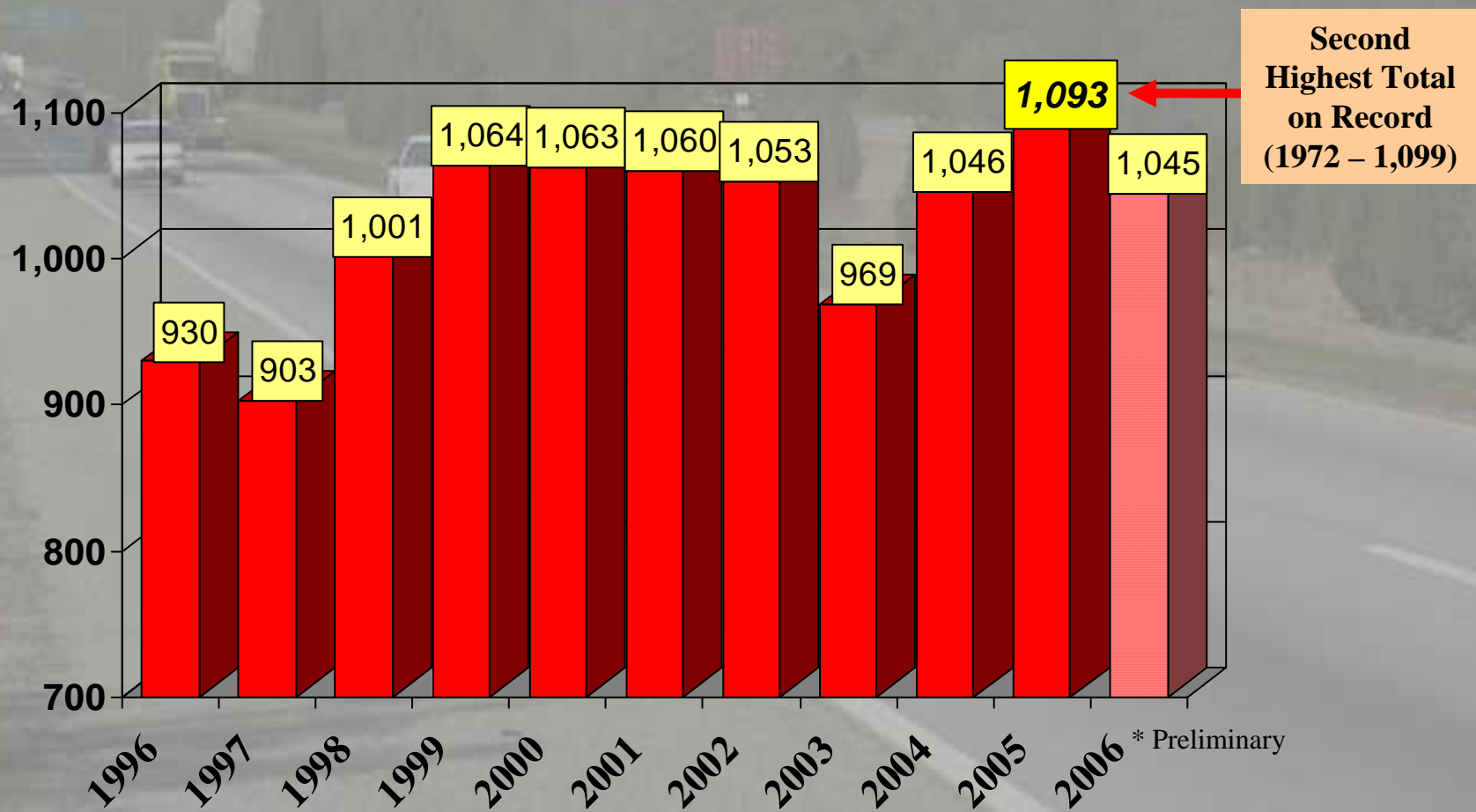
## Interstate vs Secondary Routes

(per hundred million vehicle miles of travel)



# South Carolina Traffic Crashes

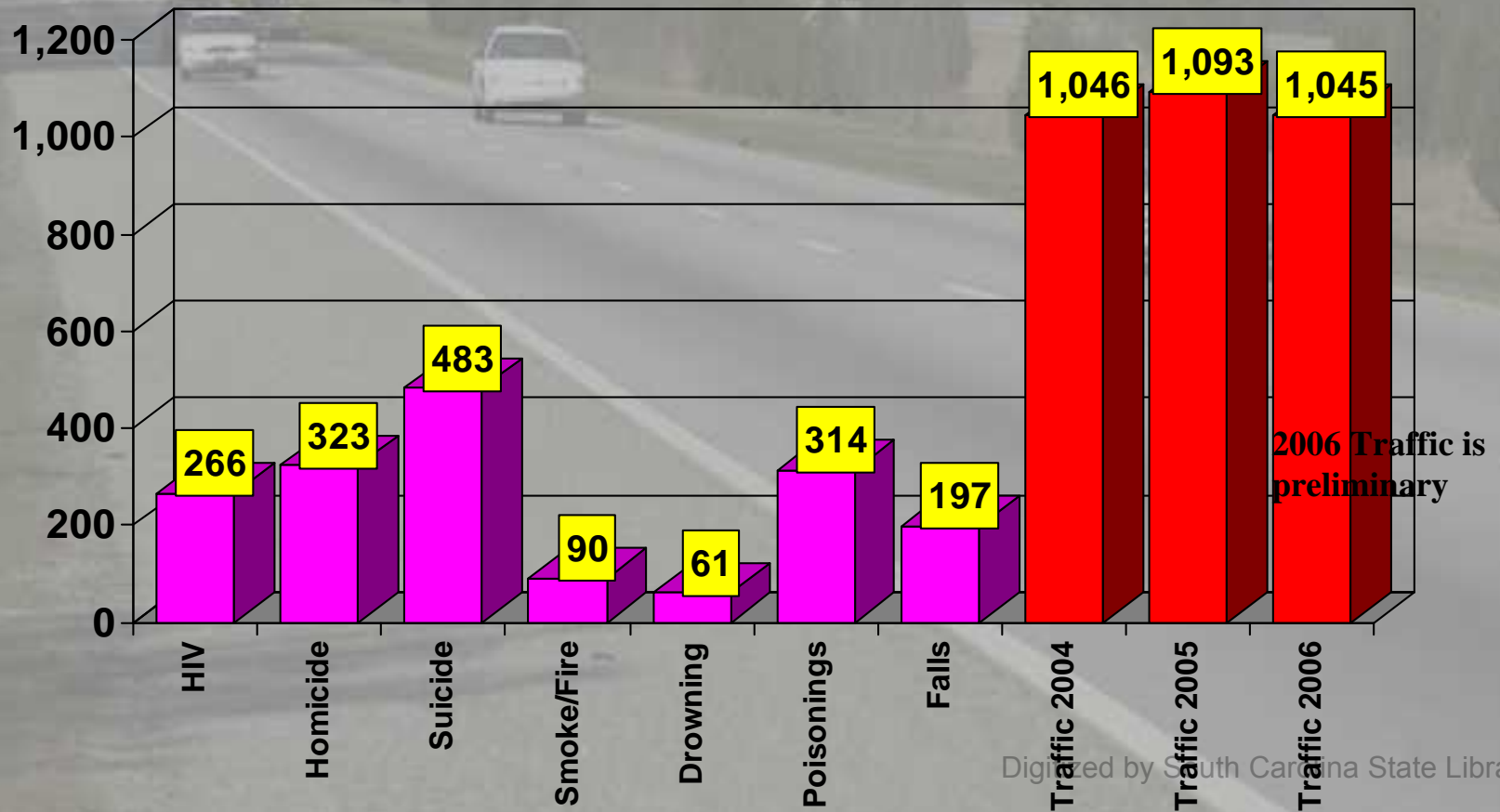
## Traffic Fatalities



# South Carolina Traffic Trends

## Traffic Deaths vs Deaths from Other Causes

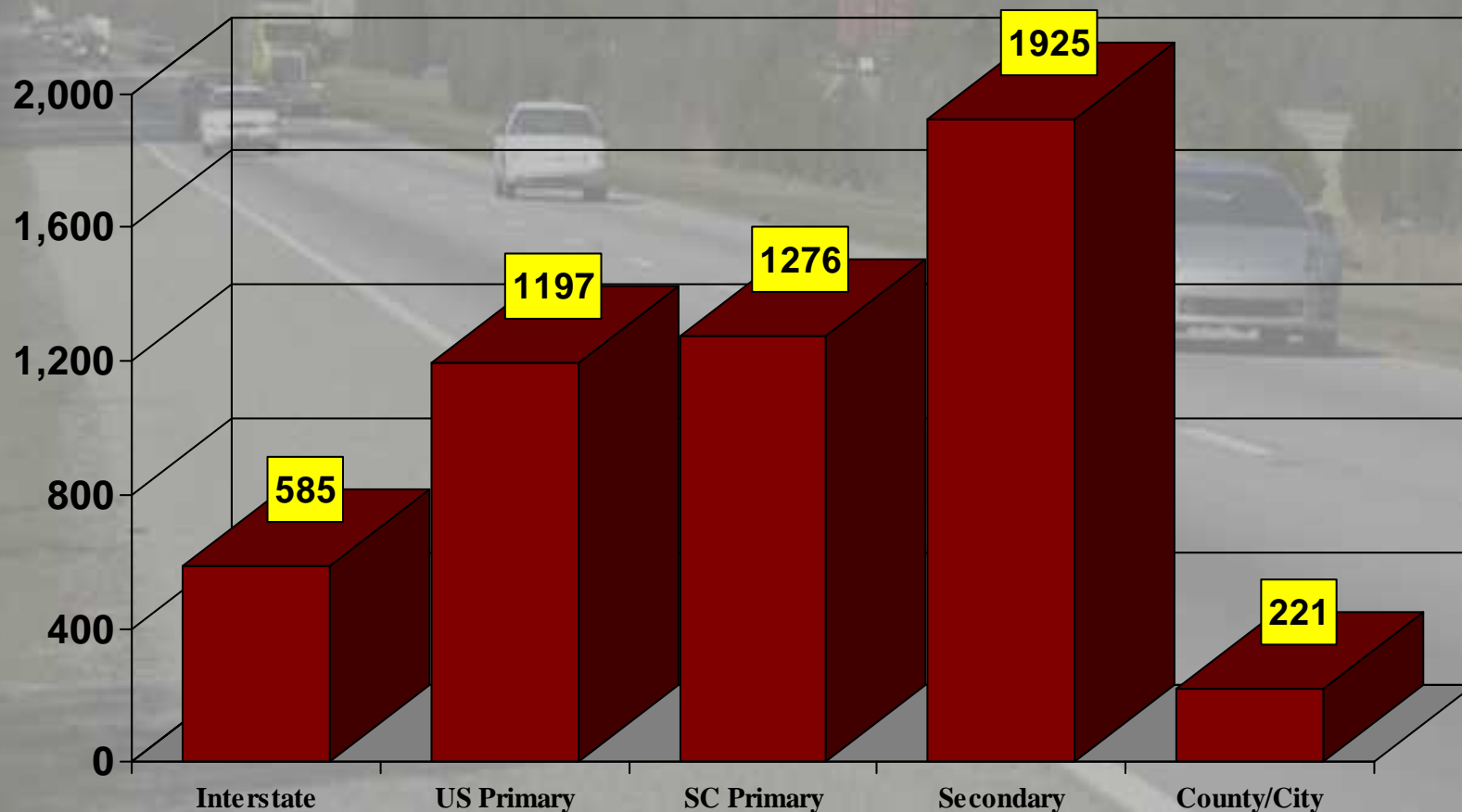
(Deaths from Other Causes are 2004 Figures as provided by SCDHEC)



# South Carolina Traffic Trends

## Traffic Fatalities by Route Category

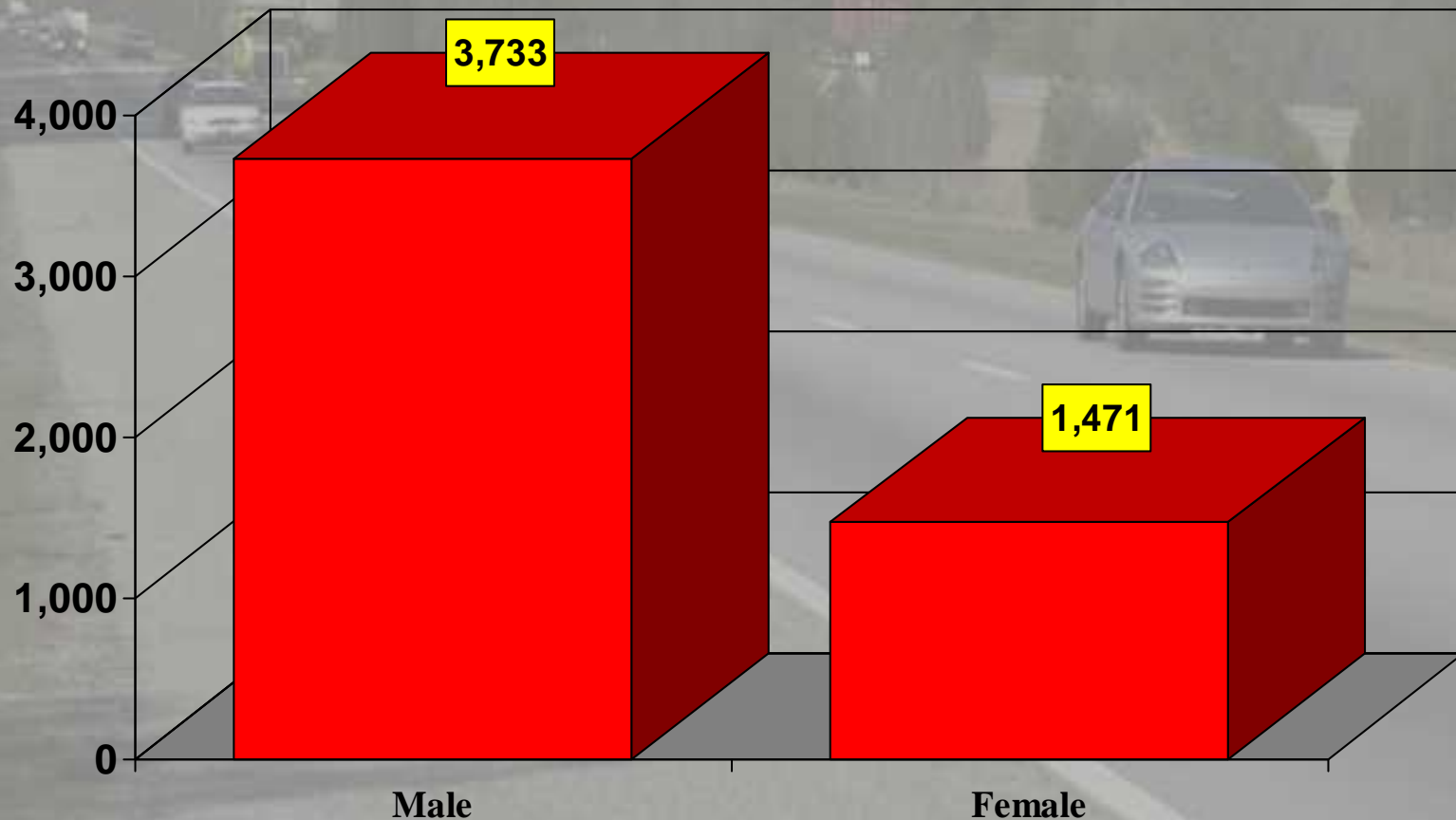
2002 - 2006





# South Carolina Traffic Trends

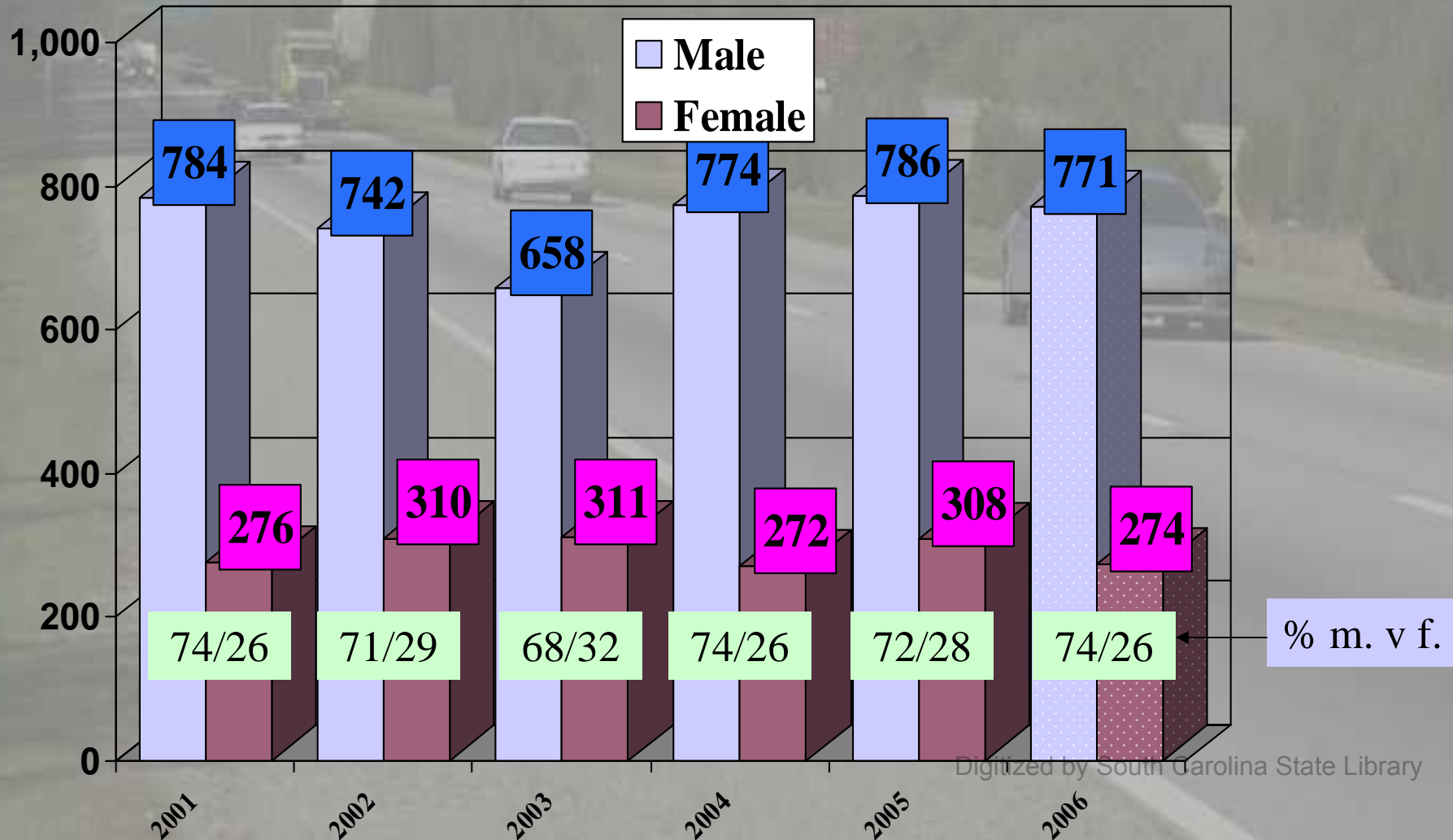
## Fatalities by Gender 2002 - 2006



# South Carolina Traffic Fatalities

Male v Female

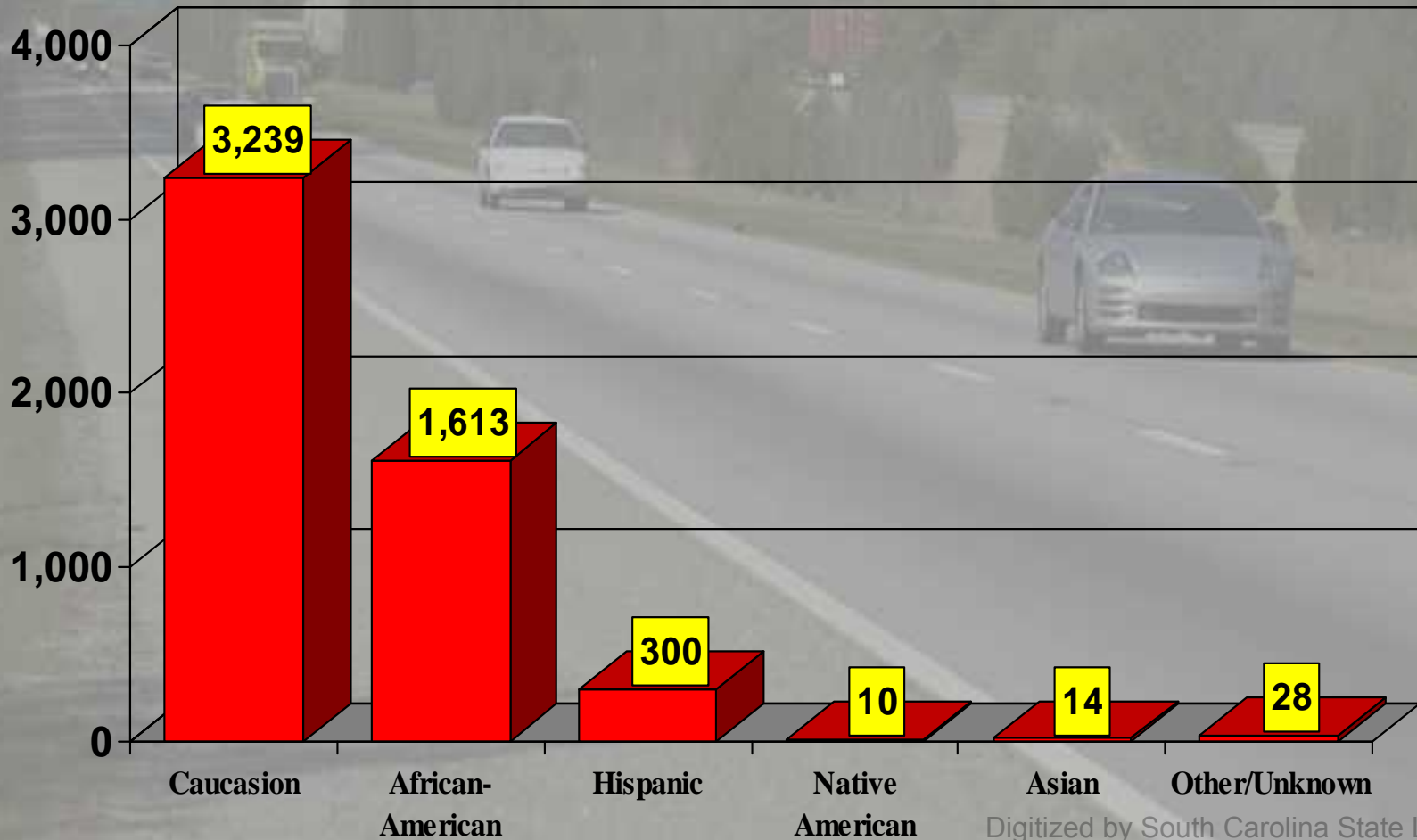
2001 - 2006



# South Carolina Traffic Trends

## Fatalities by Race

2002 - 2006



# Leading Counties for Traffic Fatalities

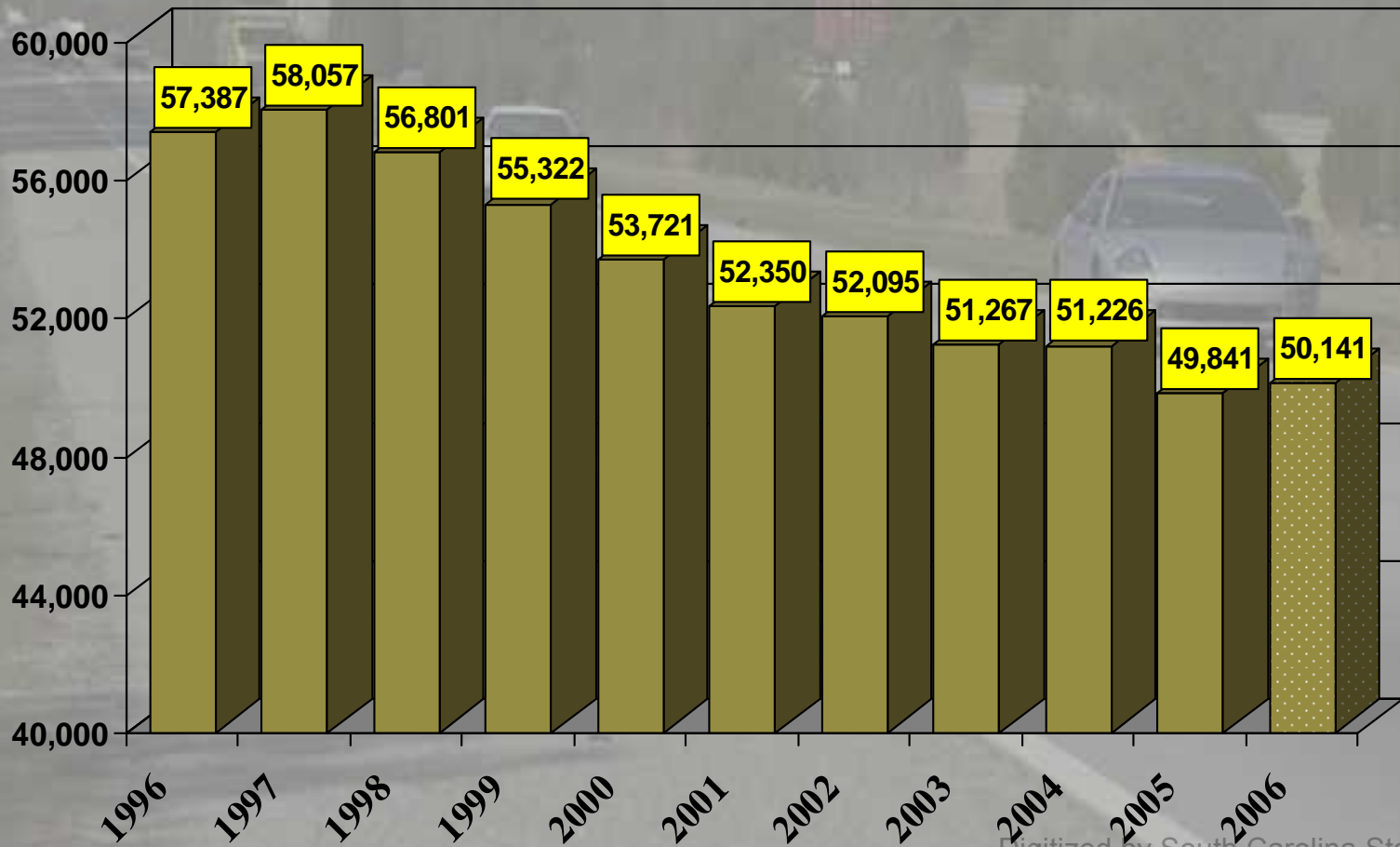
2002 - 2006

- Greenville ..... 352
- Horry ..... 330
- Richland ..... 268
- Spartanburg ..... 263
- Charleston..... 246
- Orangeburg ..... 234
- Lexington ..... 230

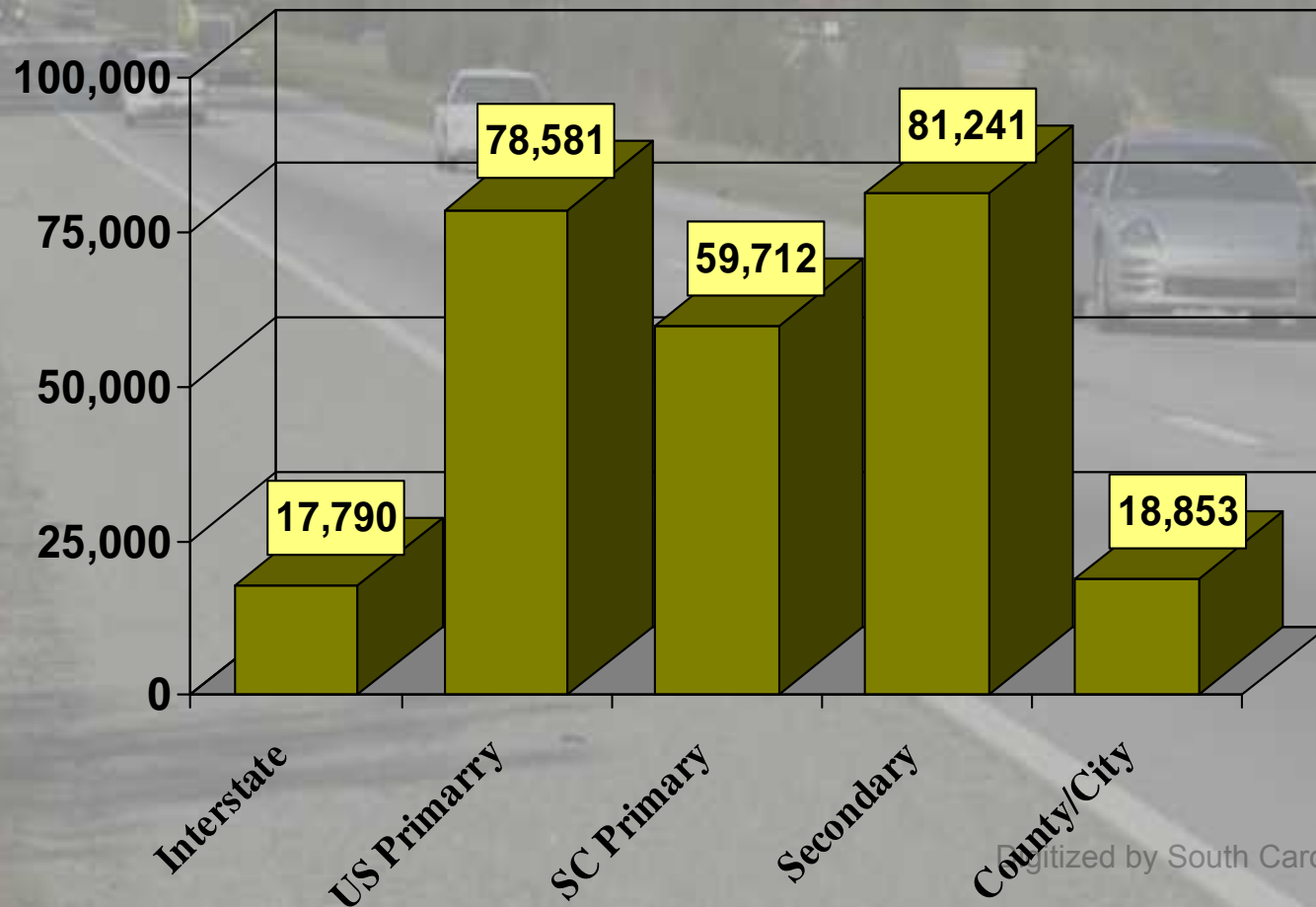


# South Carolina Traffic Crashes

## Non-Fatal Traffic Injuries

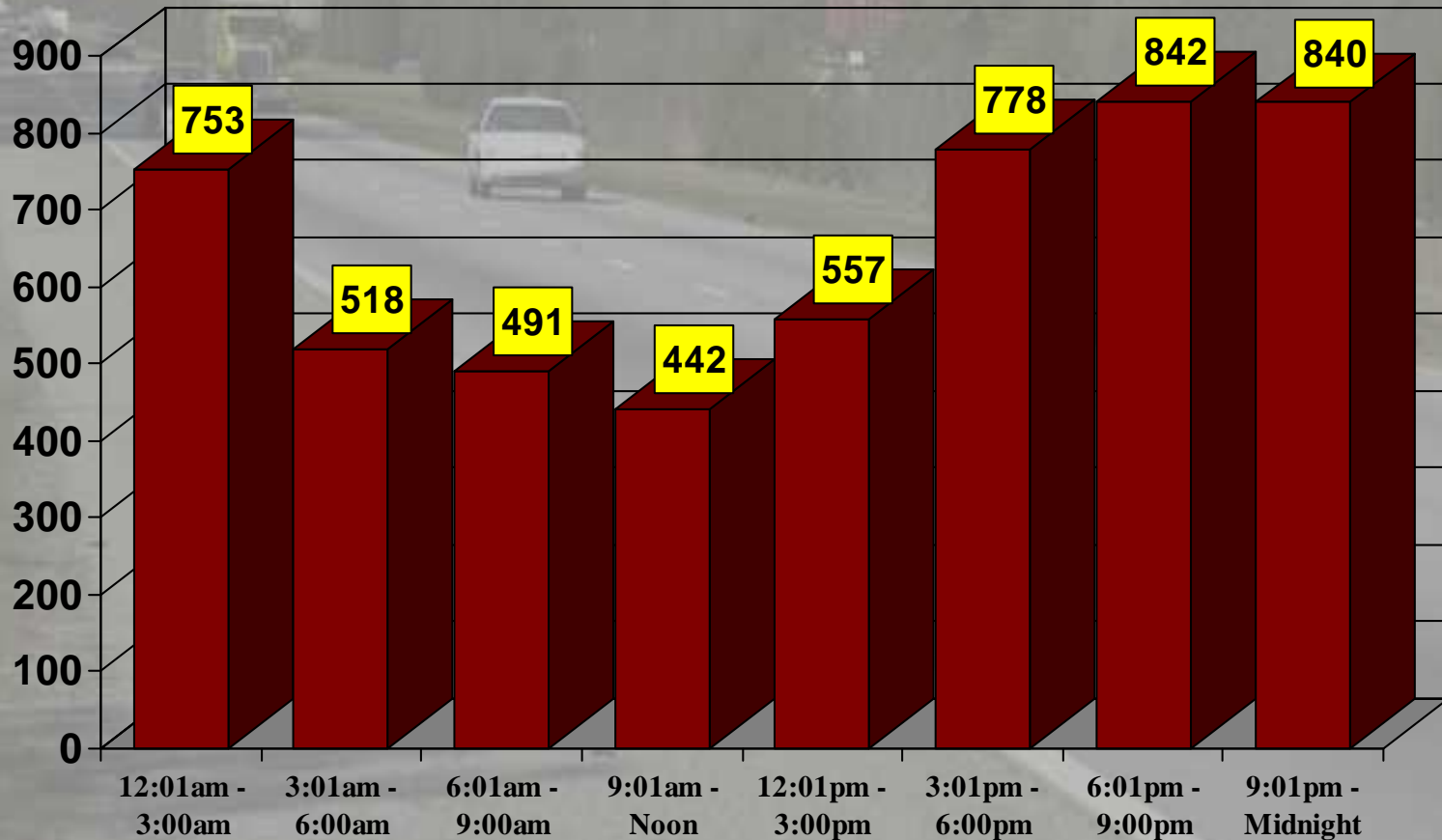


# Non-Fatal Traffic Injuries by Route Category 2001 - 2005



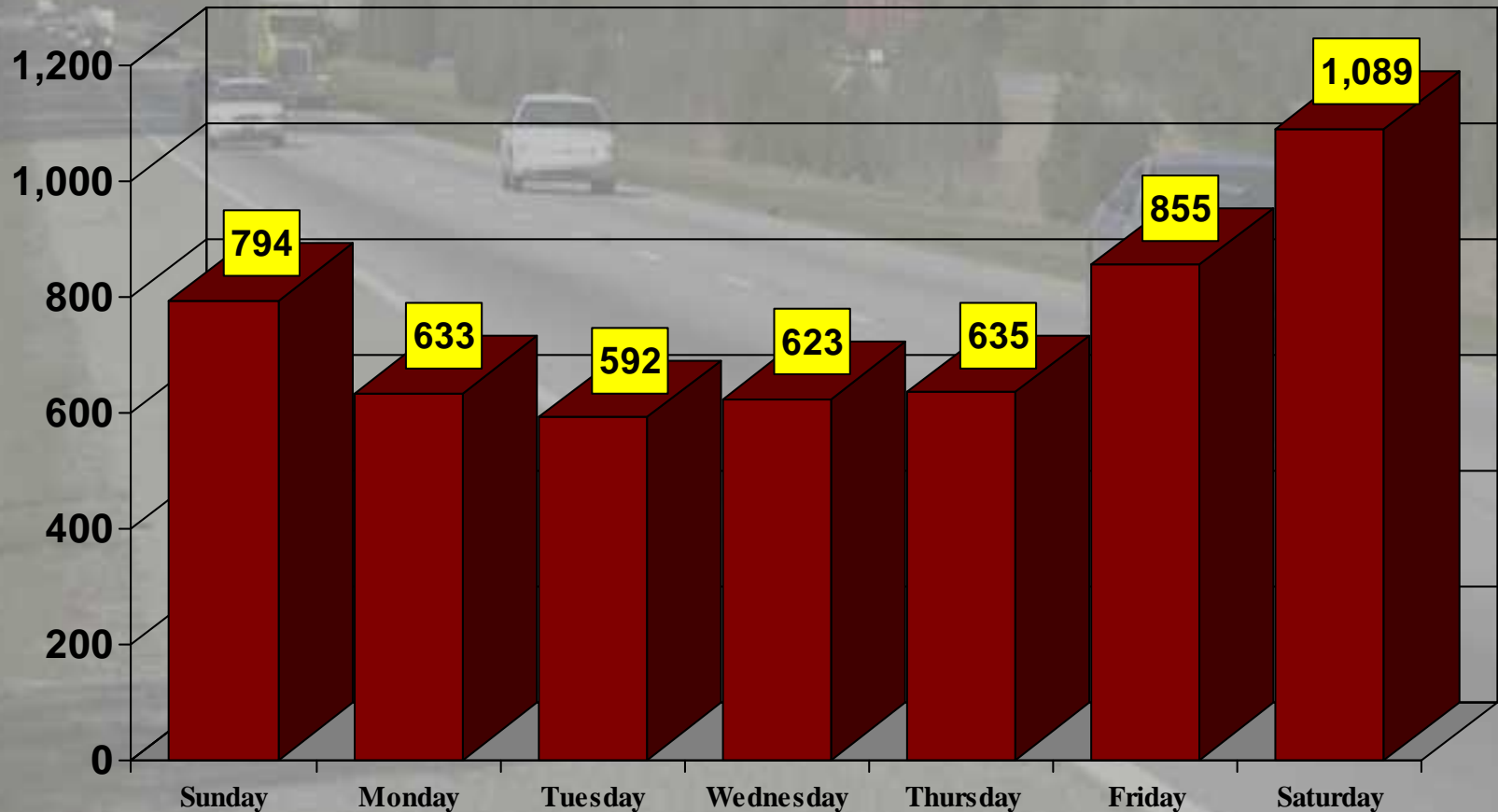
# South Carolina Traffic Trends

## Traffic Fatalities by Time of Day 2001 - 2005



# South Carolina Traffic Trends

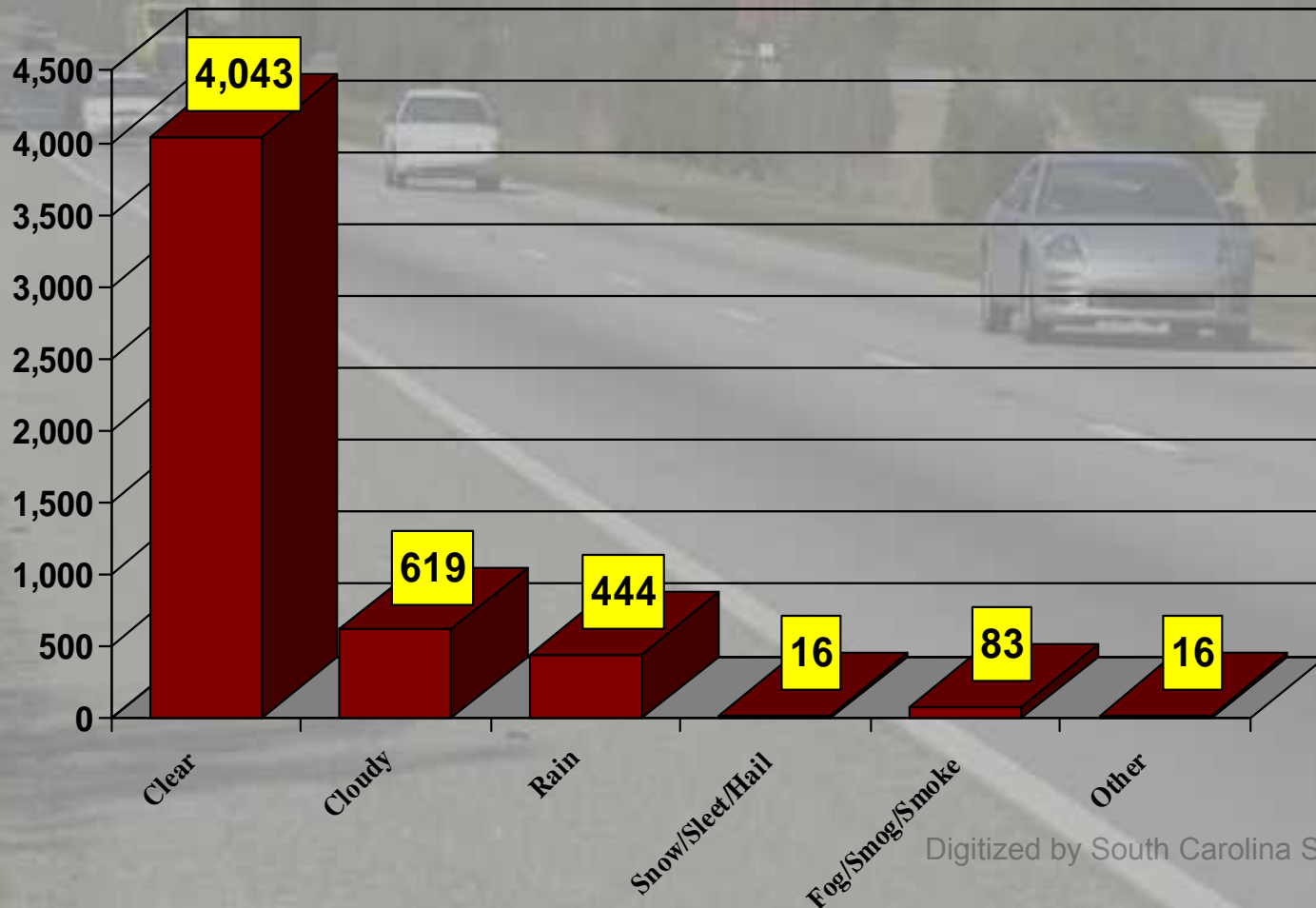
## Traffic Fatalities by Day of Week 2001 - 2005





# South Carolina Traffic Trends

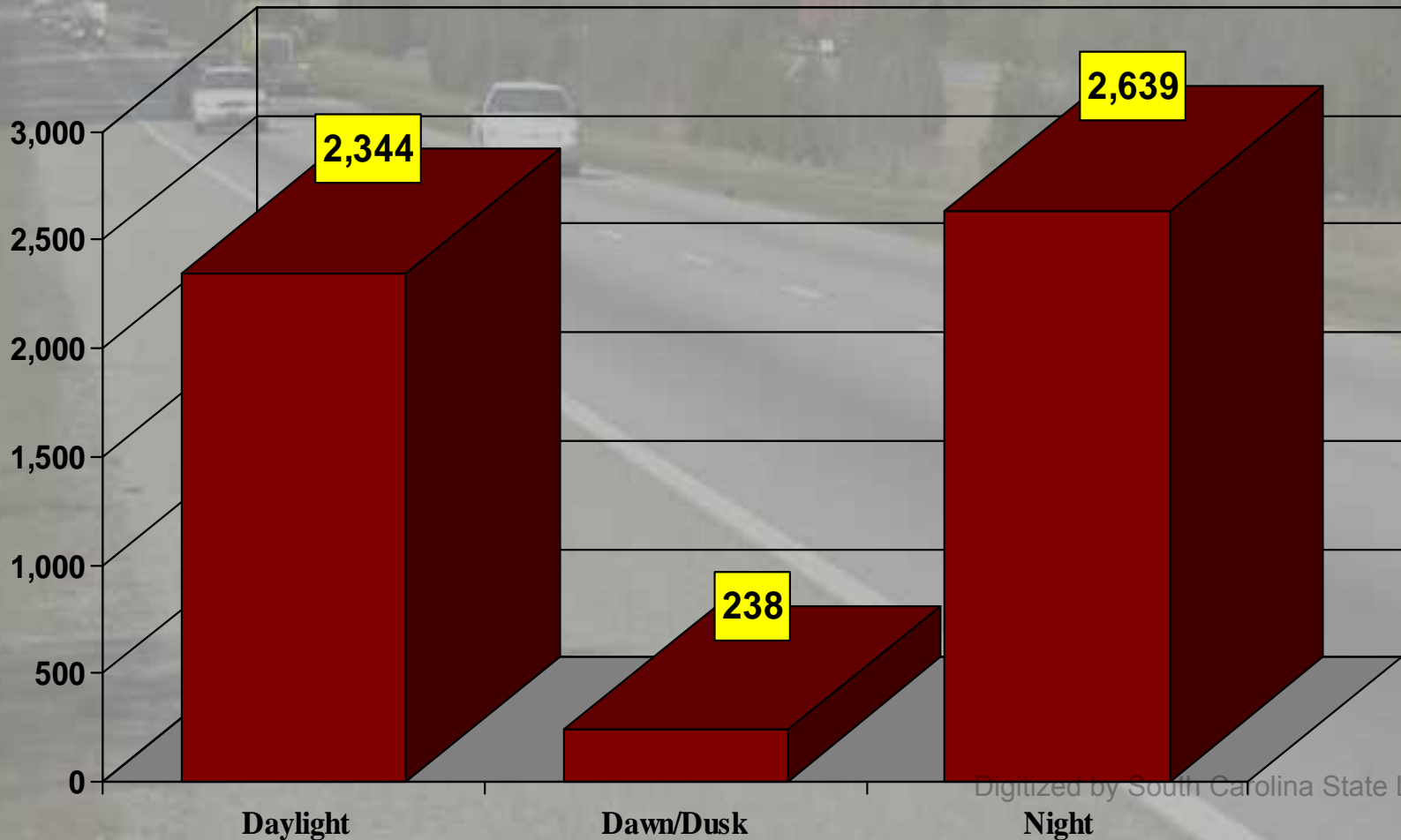
## Traffic Fatalities by Weather Conditions 2001 - 2005



# South Carolina Traffic Trends

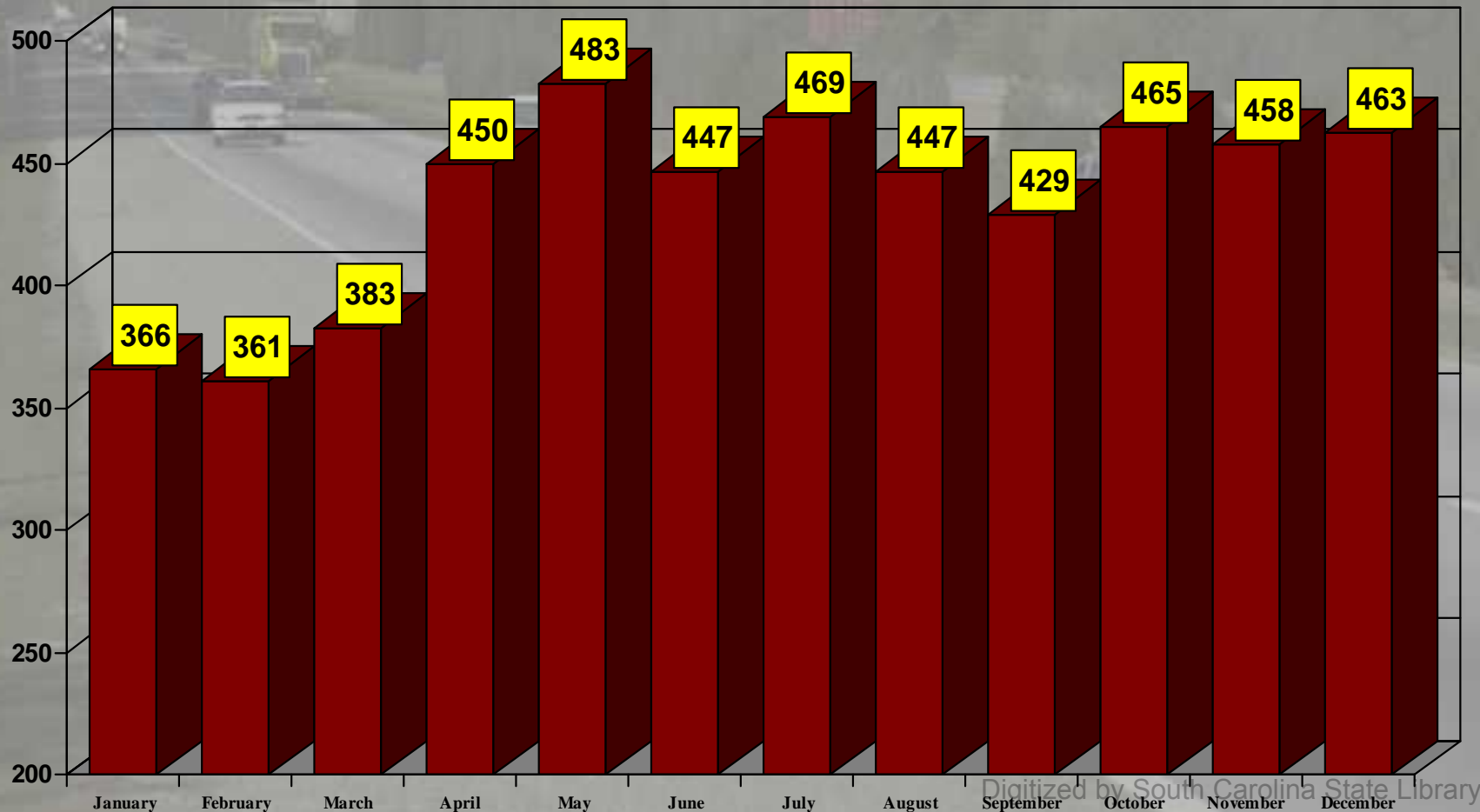
## Traffic Fatalities by Light Conditions

2001 - 2005



# South Carolina Traffic Trends

## Traffic Fatalities by Month 2001 - 2005



# Leading Counties for Injuries 2002 - 2006

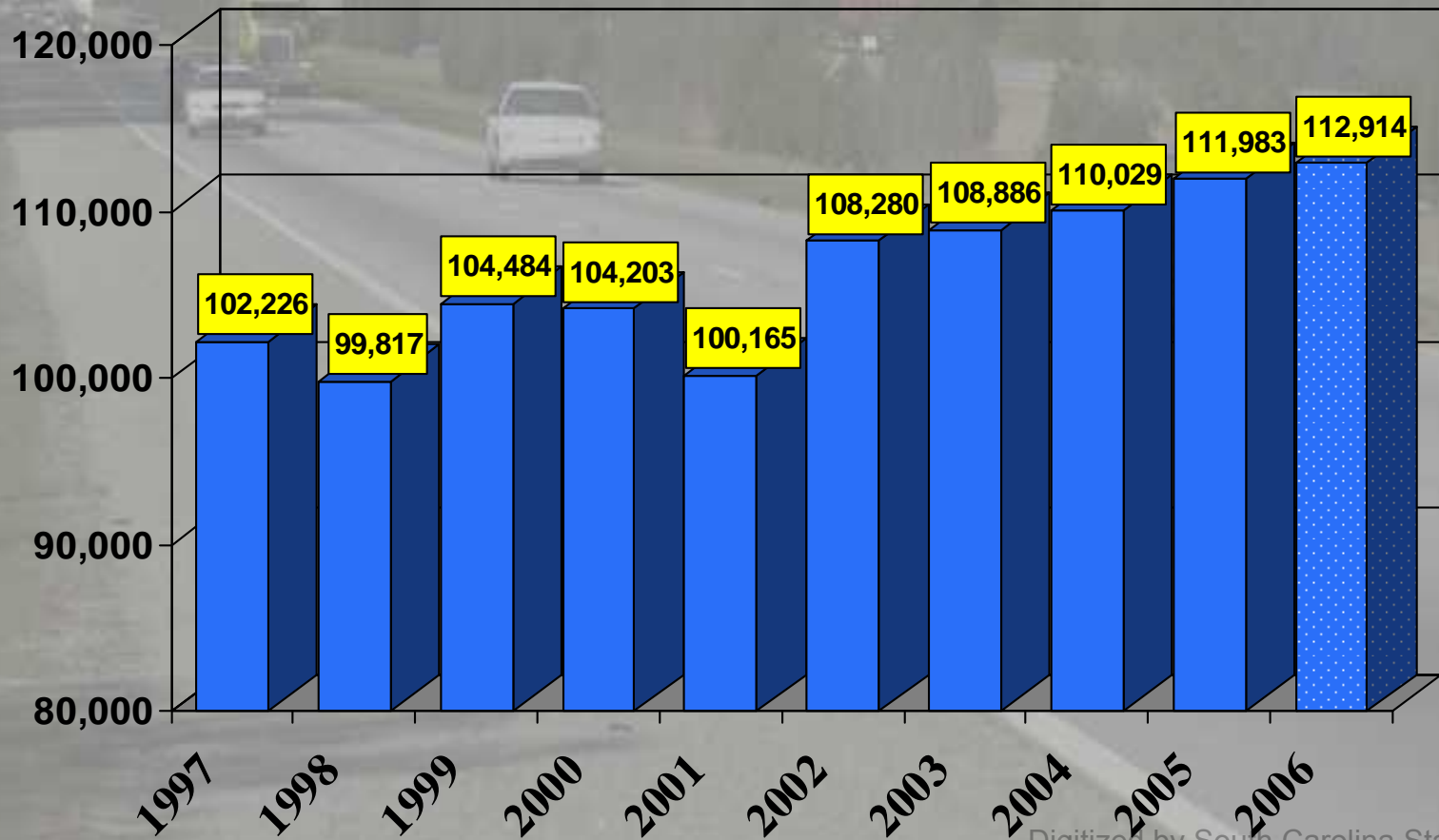
- **Charleston ..... 27,075**
- **Richland..... 22,149**
- **Greenville ..... 19,578**
- **Horry ..... 18,567**
- **Spartanburg..... 13,646**
- **Lexington ..... 13,442**

**NOTE: All other counties had fewer than 10,000 reported injuries.**



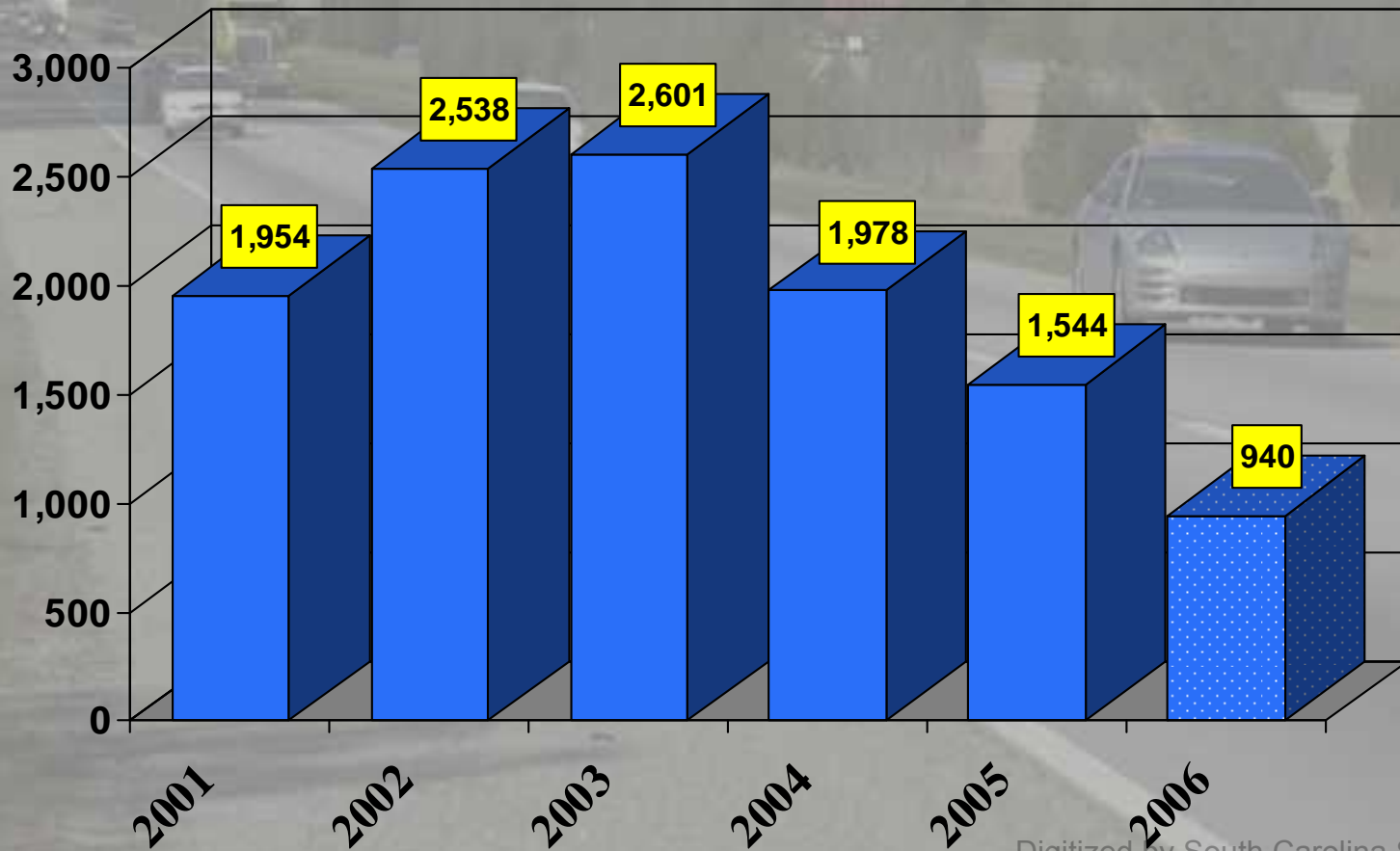
# South Carolina Traffic Trends

## Traffic Crashes



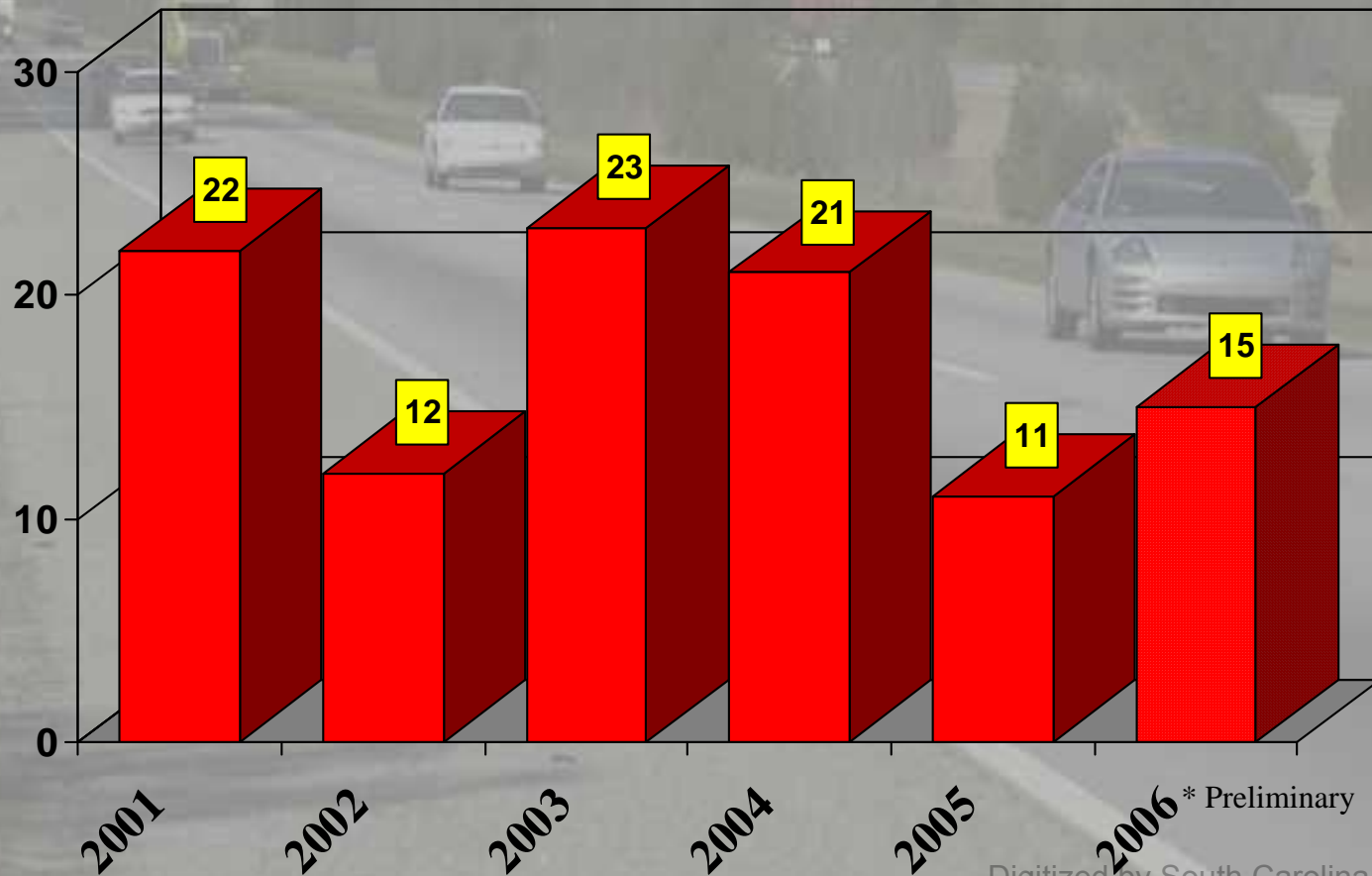
# South Carolina Traffic Trends

## Work Zone Traffic Crashes



# South Carolina Traffic Trends

## Work Zone Traffic Fatalities

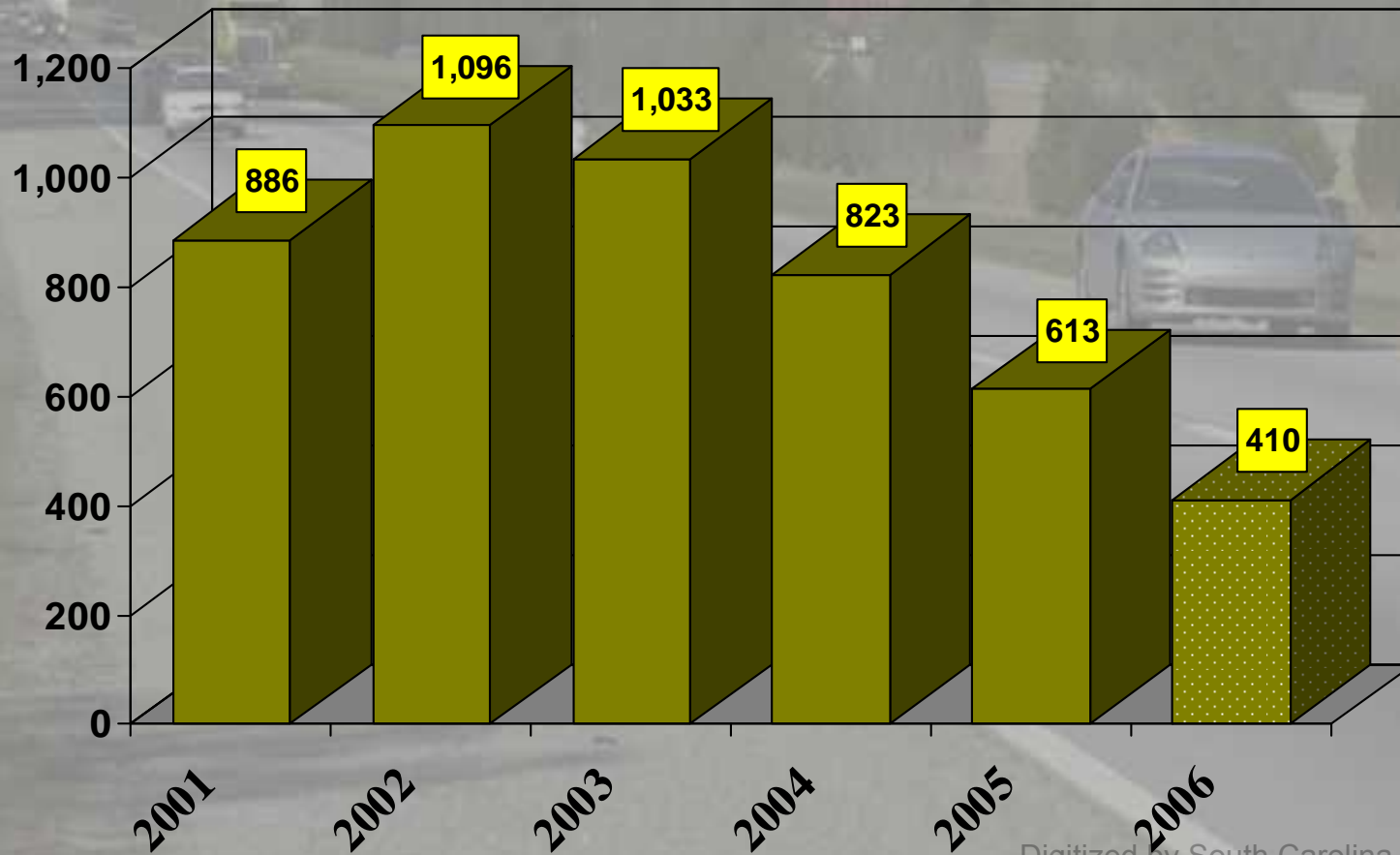


Source: SCDPS

Digitized by South Carolina State Library

# South Carolina Traffic Trends

## Work Zone Traffic Injuries

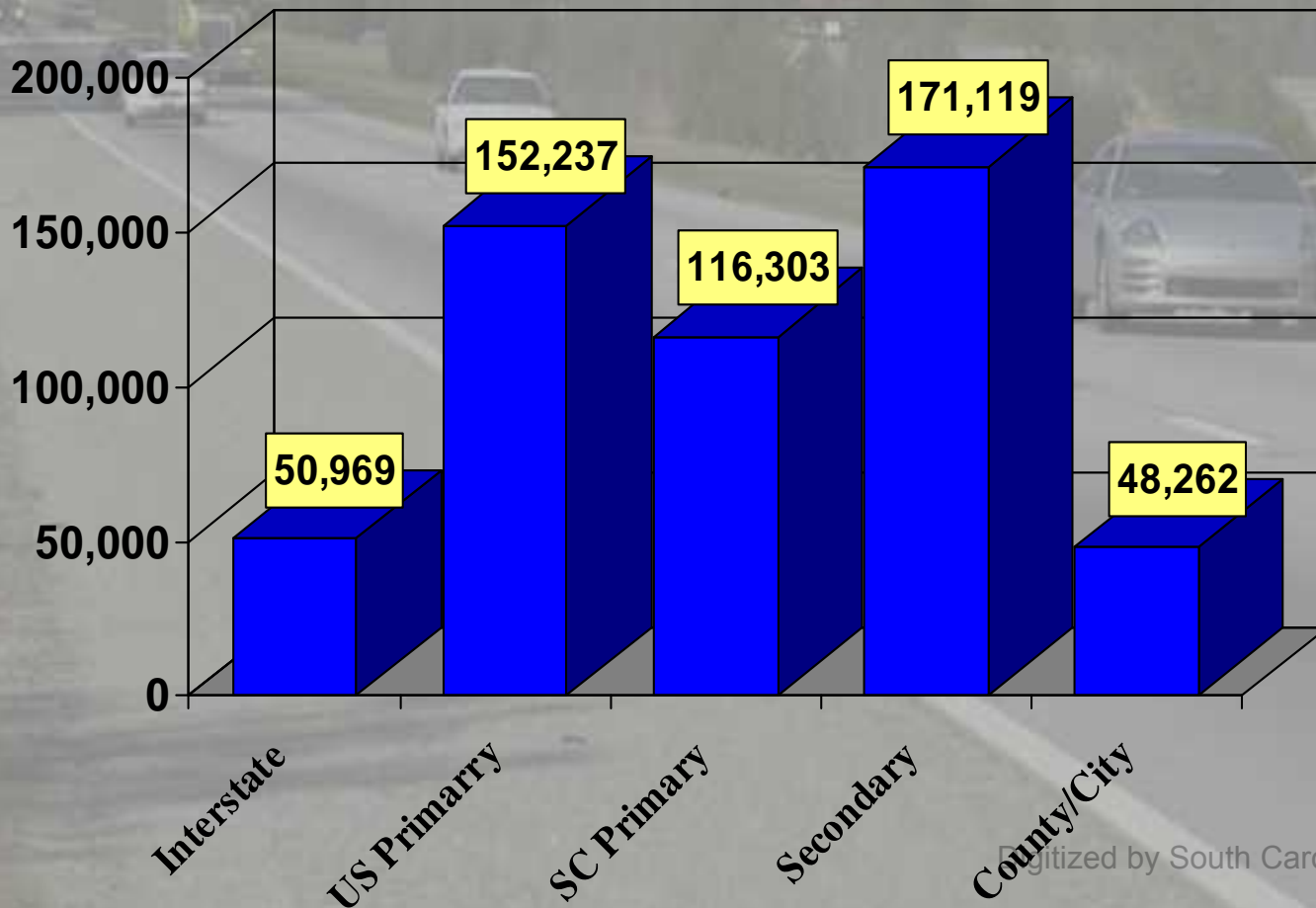


Source: SCDPS

Digitized by South Carolina State Library



# Traffic Crashes by Route Category 2001 - 2005



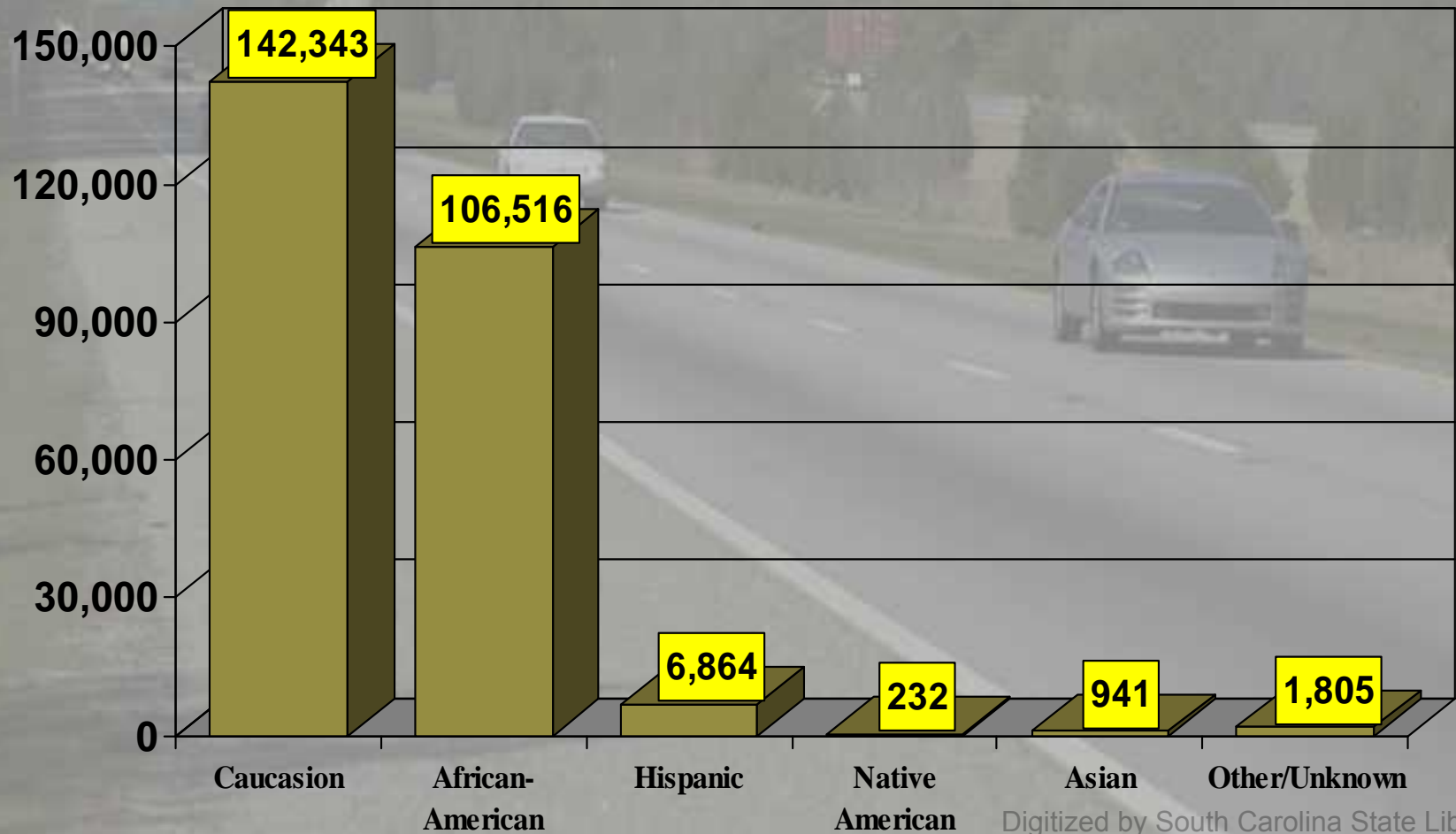
# South Carolina Traffic Trends

## Non-Fatal Injuries by Gender 2001 - 2005



# South Carolina Traffic Trends

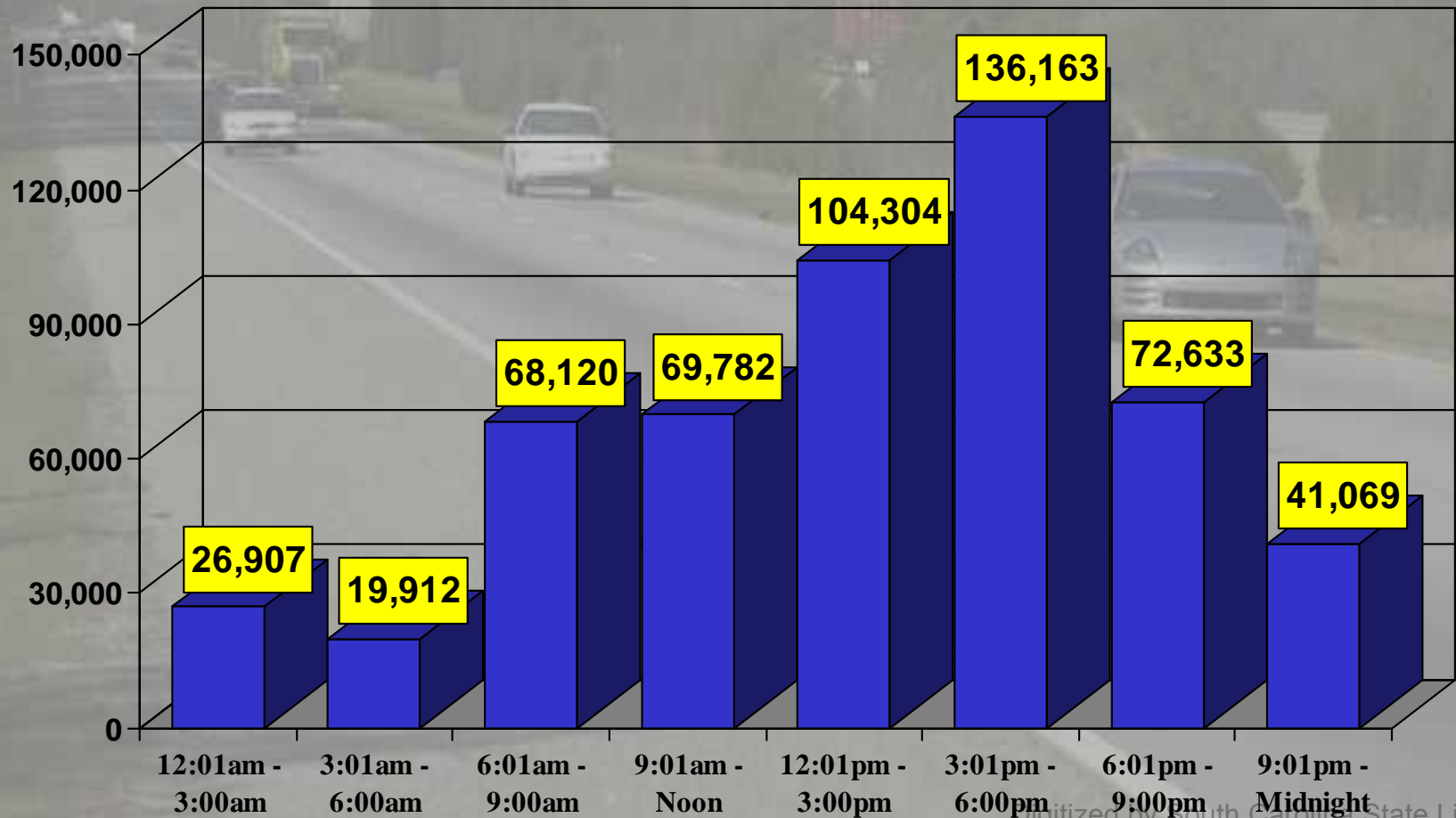
## Non-Fatal Injuries by Race 2001 - 2005



# South Carolina Traffic Trends

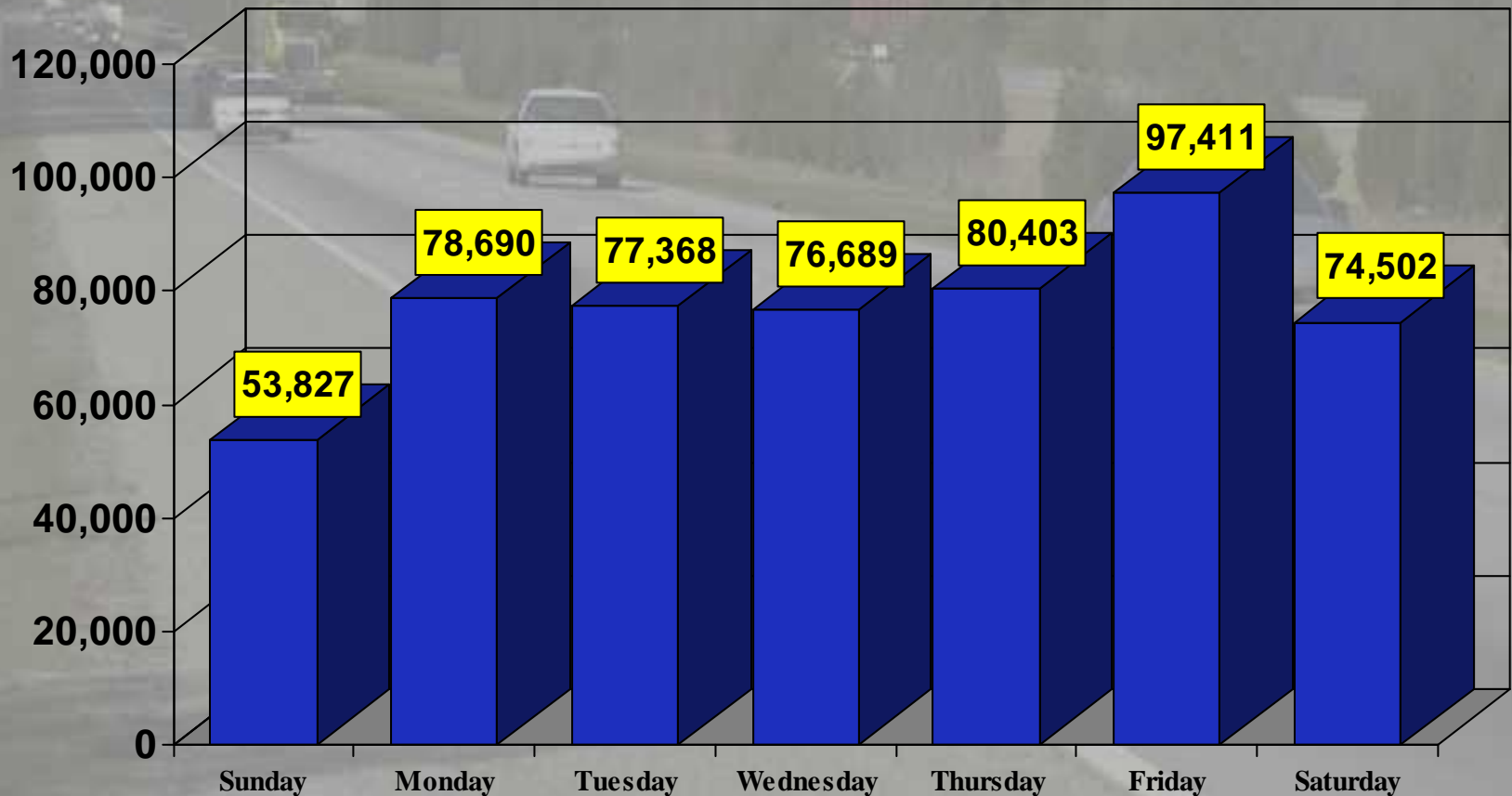
## Traffic Crashes by Time of Day

2001 - 2005



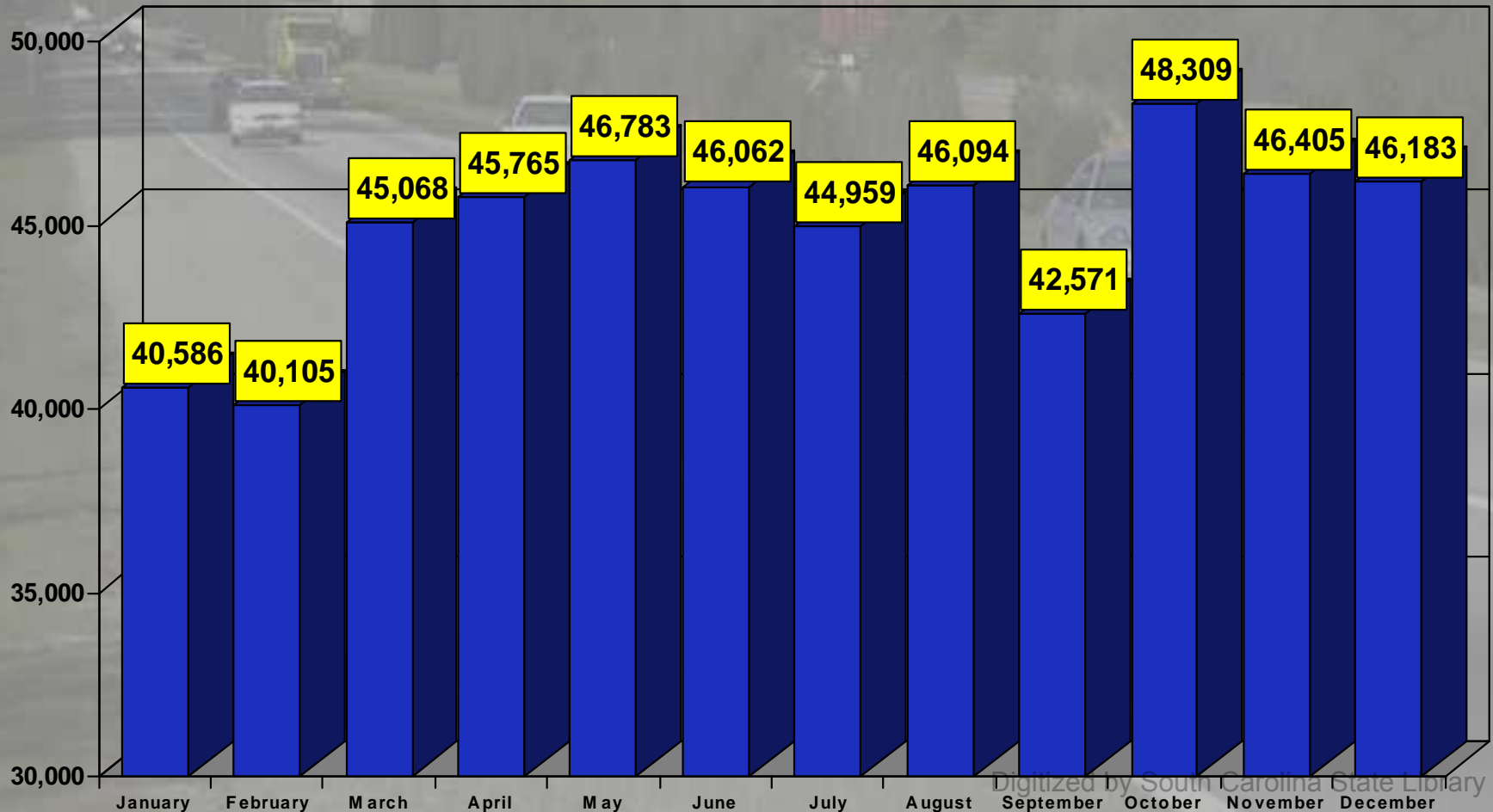
# South Carolina Traffic Trends

## Traffic Crashes by Day of Week 2001 - 2005



# South Carolina Traffic Trends

## Traffic Crashes by Month 2001 - 2005





# Leading Counties for Crashes 2002 - 2006

- **Charleston ..... 63,466**
- **Greenville ..... 57,572**
- **Richland ..... 54,403**
- **Horry ..... 39,625**
- **Spartanburg..... 33,753**
- **Lexington ..... 31,230**

**NOTE: All other counties had fewer than 25,000 reported crashes during this period.**

# **South Carolina Traffic Deaths**

## **Where Does South Carolina Rank@?**

<b>Mileage Death Rate - 2005</b>	<b>3<sup>1</sup></b>
<b>DUI Death Rate .....</b>	<b>3<sup>1</sup></b>
<b>Motorcycle Death Rate ...</b>	<b>2<sup>2</sup></b>
<b>Pedalcycle Death Rate ....</b>	<b>8<sup>3</sup></b>
<b>Pedestrian Death Rate ....</b>	<b>8<sup>3</sup></b>
<b>Speed Related Death Rate</b>	<b>1<sup>1</sup></b>

**1 – Figure Based on Vehicle Miles of Travel - 2005**

**2 – Based on Registered Motorcycles - 2005**

**3 – Based on Resident Population - 2005**

**@Rankings exclude District of  
Columbia and Puerto Rico**

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# South Carolina Mileage Death Rate Ranking - 2004

1. Mississippi .....	2.28
2. South Dakota .....	2.24
3. Arkansas .....	2.22
4. New Mexico .....	2.18
<i>5. South Carolina .....</i>	<i>2.11</i>

# South Carolina Mileage Death Rate Ranking - 2005

1. Montana .....	2.256
2. South Dakota .....	2.215
<b>3. <i>South Carolina</i>.....</b>	<b>2.211</b>
4. Mississippi .....	2.207
5. Louisiana .....	2.123
50. Massachusetts .....	0.797
<b>US Average .....</b>	<b>1.453</b>

There were 1,093 traffic deaths in SC in 2005. The mileage death rate is based on deaths per 100 million vehicle miles of travel. The SC rate is **52%** above the national average.

# South Carolina Mileage Death Rate Ranking - 2006

1. Montana .....	2.xxx
2. South Dakota .....	2.xxx
<b>3. <i>South Carolina</i>.....</b>	<b>2.098</b>
4. Mississippi .....	2.xxx
5. Louisiana .....	2.xxx
50. Massachusetts .....	0.xxx
<b>US Average .....</b>	<b>1.44</b>

There were 1,045 traffic deaths in SC in 2006. The mileage death rate is based on deaths per 100 million vehicle miles of travel. The SC rate is 46% above the national average.



# South Carolina Economic Loss 2005

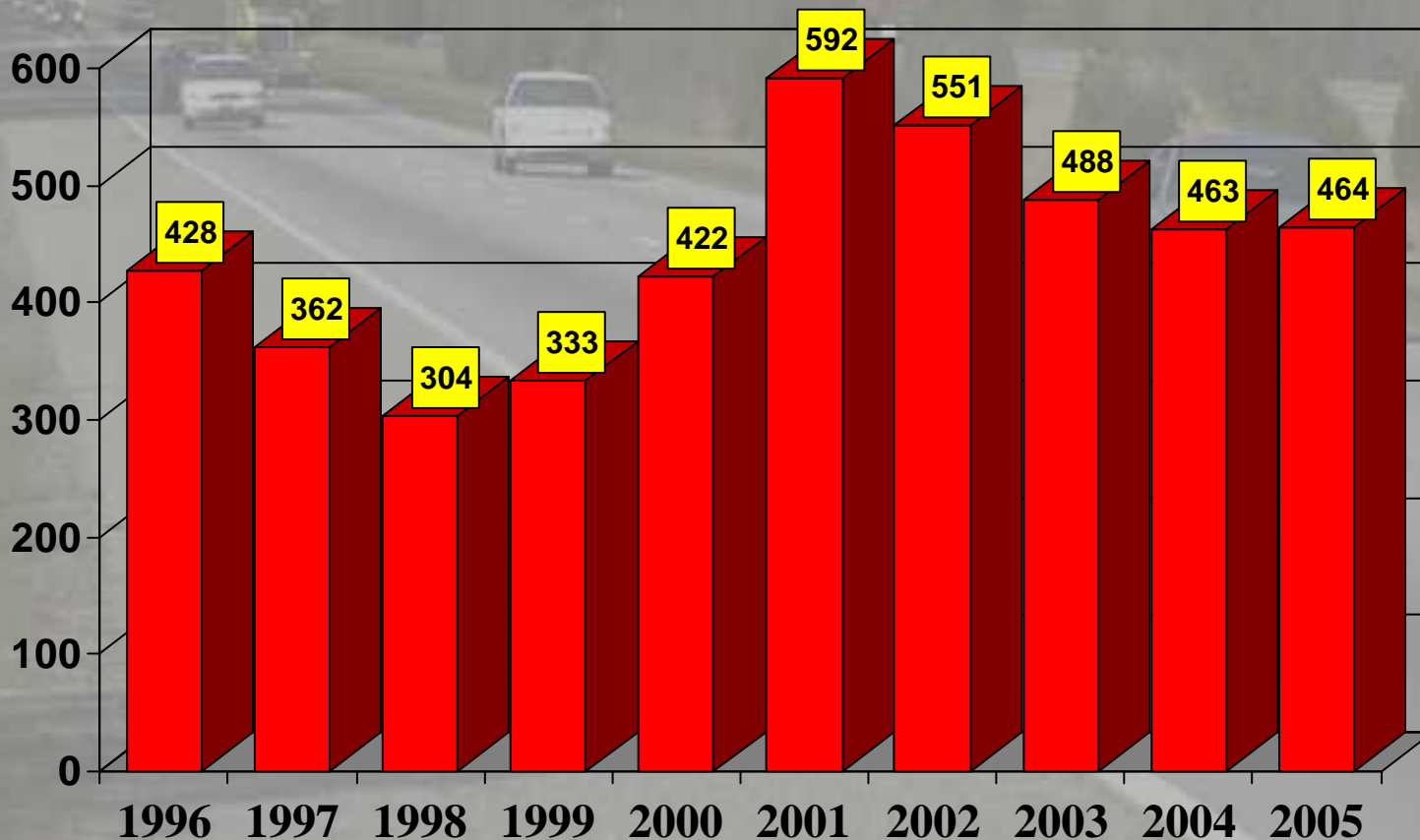
Property Damage Crashes	\$ 7,400
Possible Injuries	\$ 10,700
Incapacitating Injuries	\$ 10,900
Incapacitating Injuries	\$ 58,500
Fatalities	\$1,130,000
<i>Average Cost Per Crash</i>	<i>\$ 23,900</i>

**South Carolina Economic Loss in 2005: \$2.67 Billion**



# South Carolina Traffic Trends

## Alcohol/Drug Related Fatalities

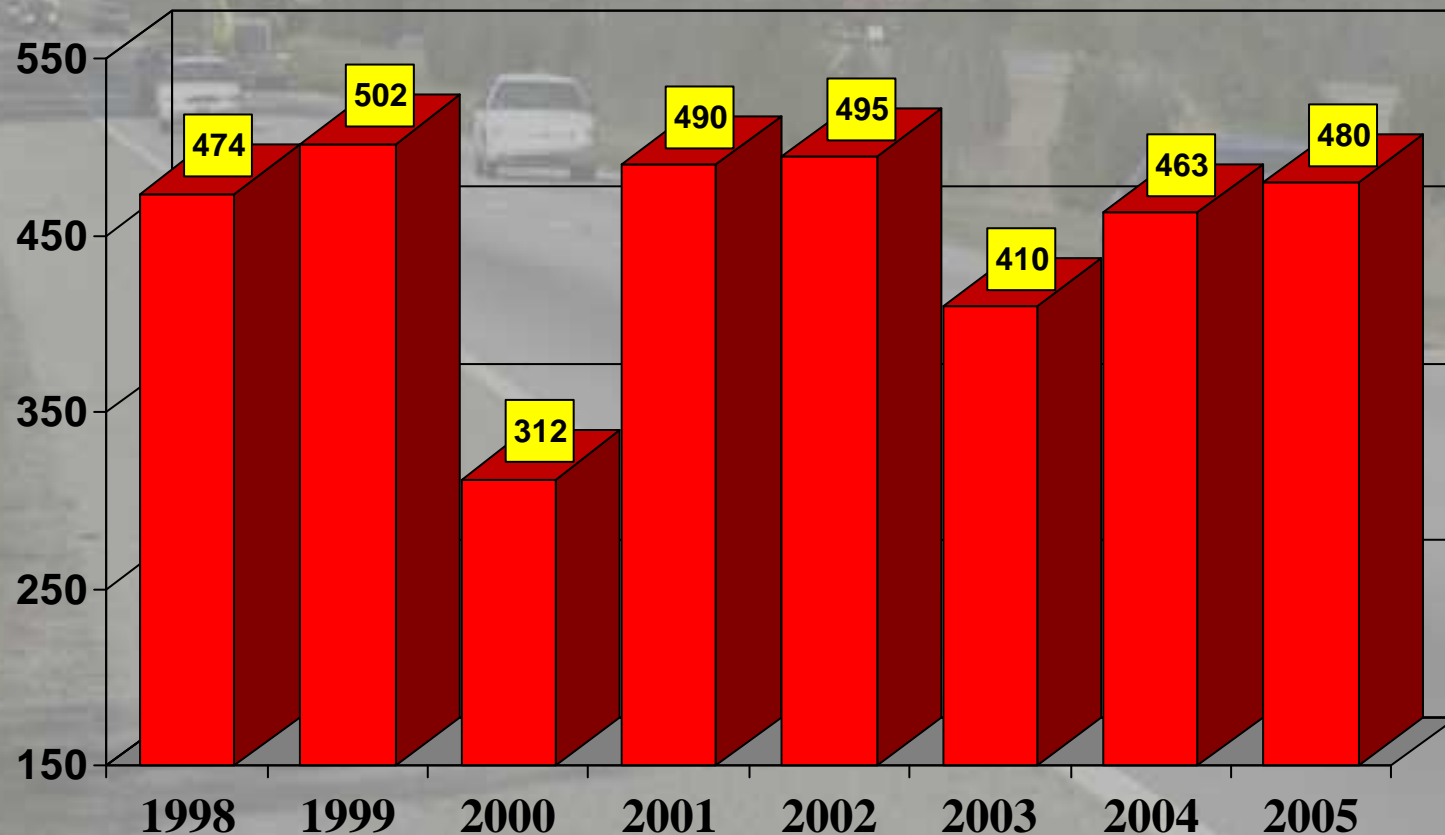


Source: FARS

Digitized by South Carolina State Library

# South Carolina Traffic Trends

## Fatalities in Speed Related Collisions

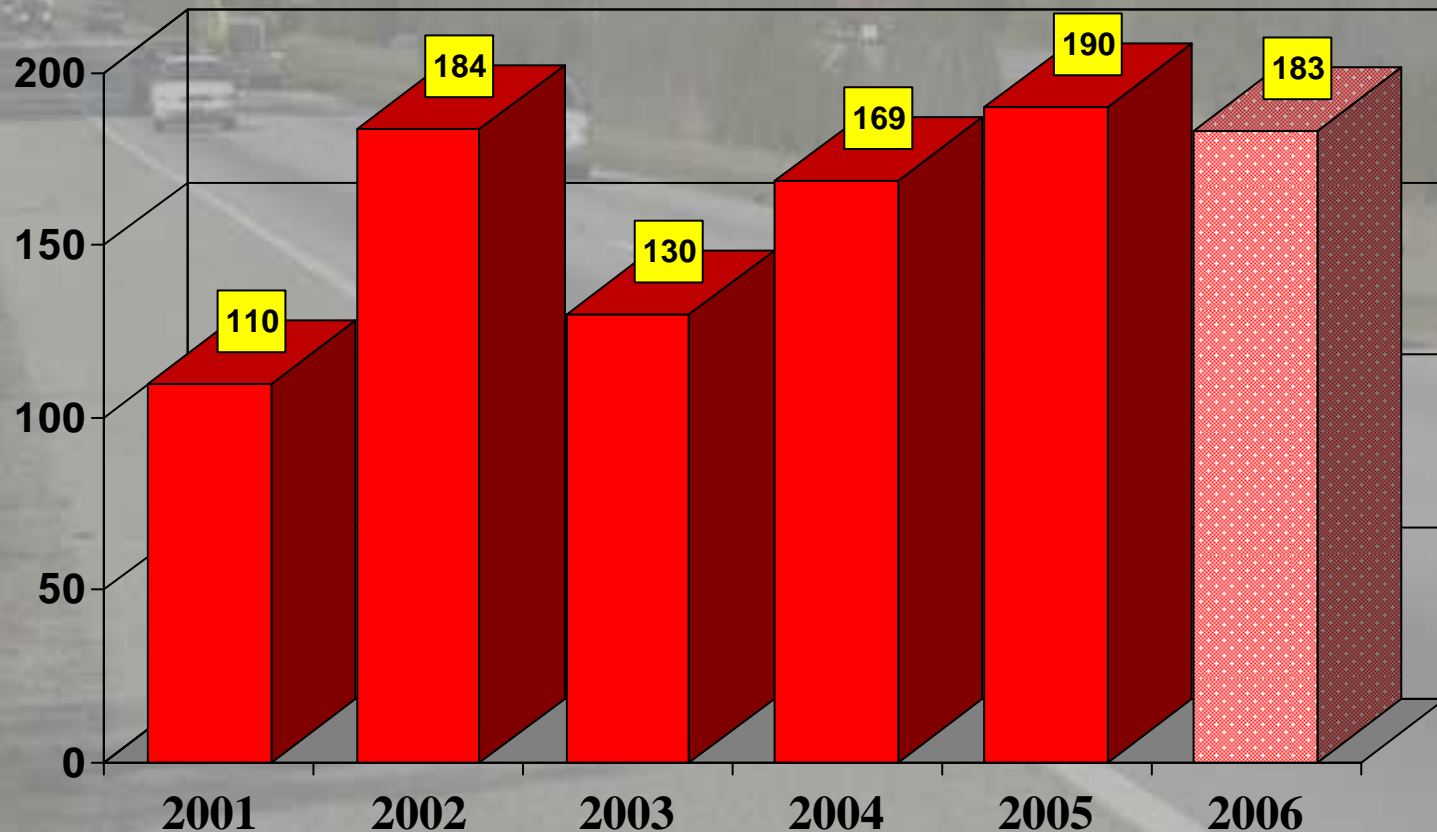


Source: FARS

Digitized by South Carolina State Library

# South Carolina Traffic Trends

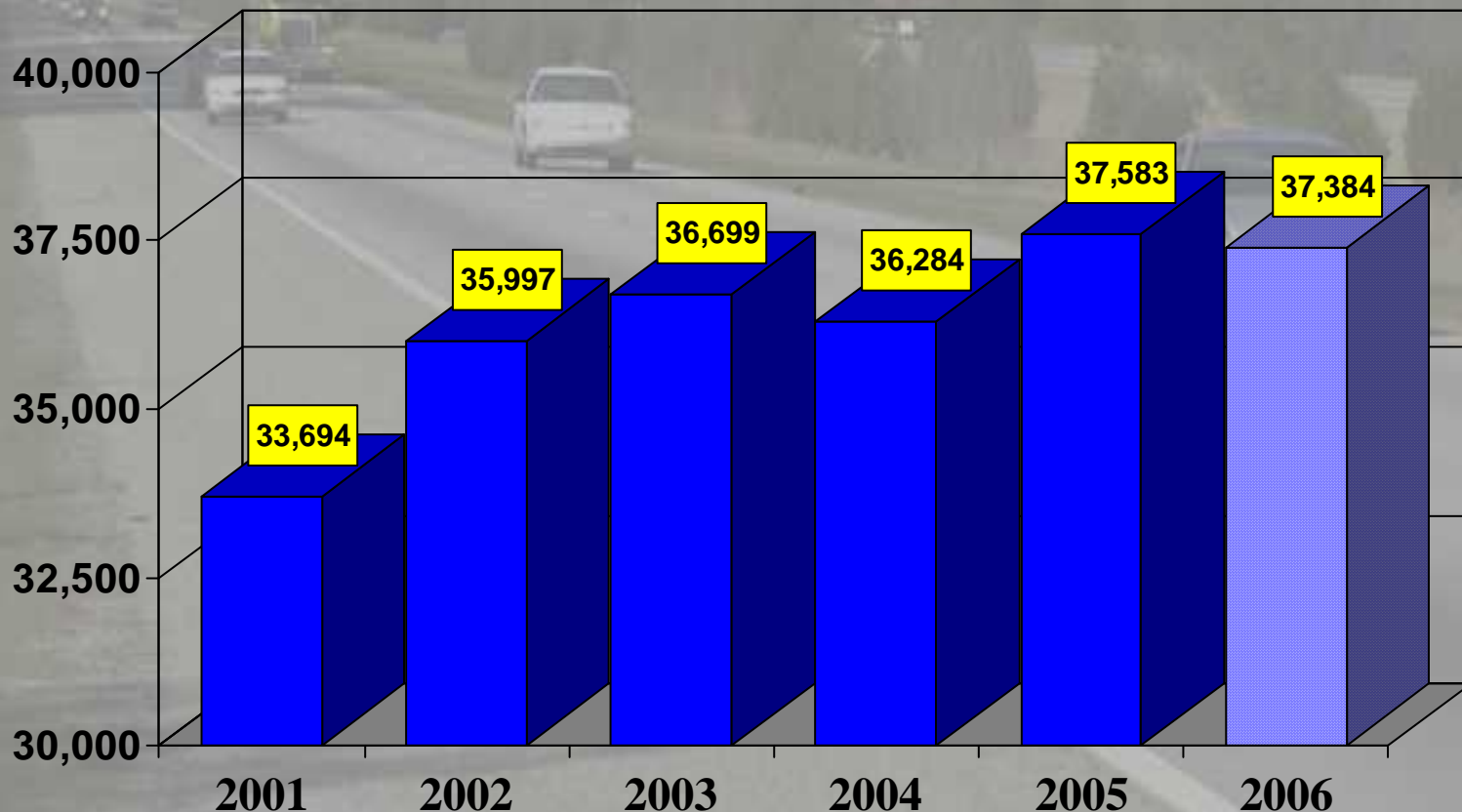
## Fatalities in Tree Related Collisions



\* 2006 Figure is Preliminary

# South Carolina Traffic Trends

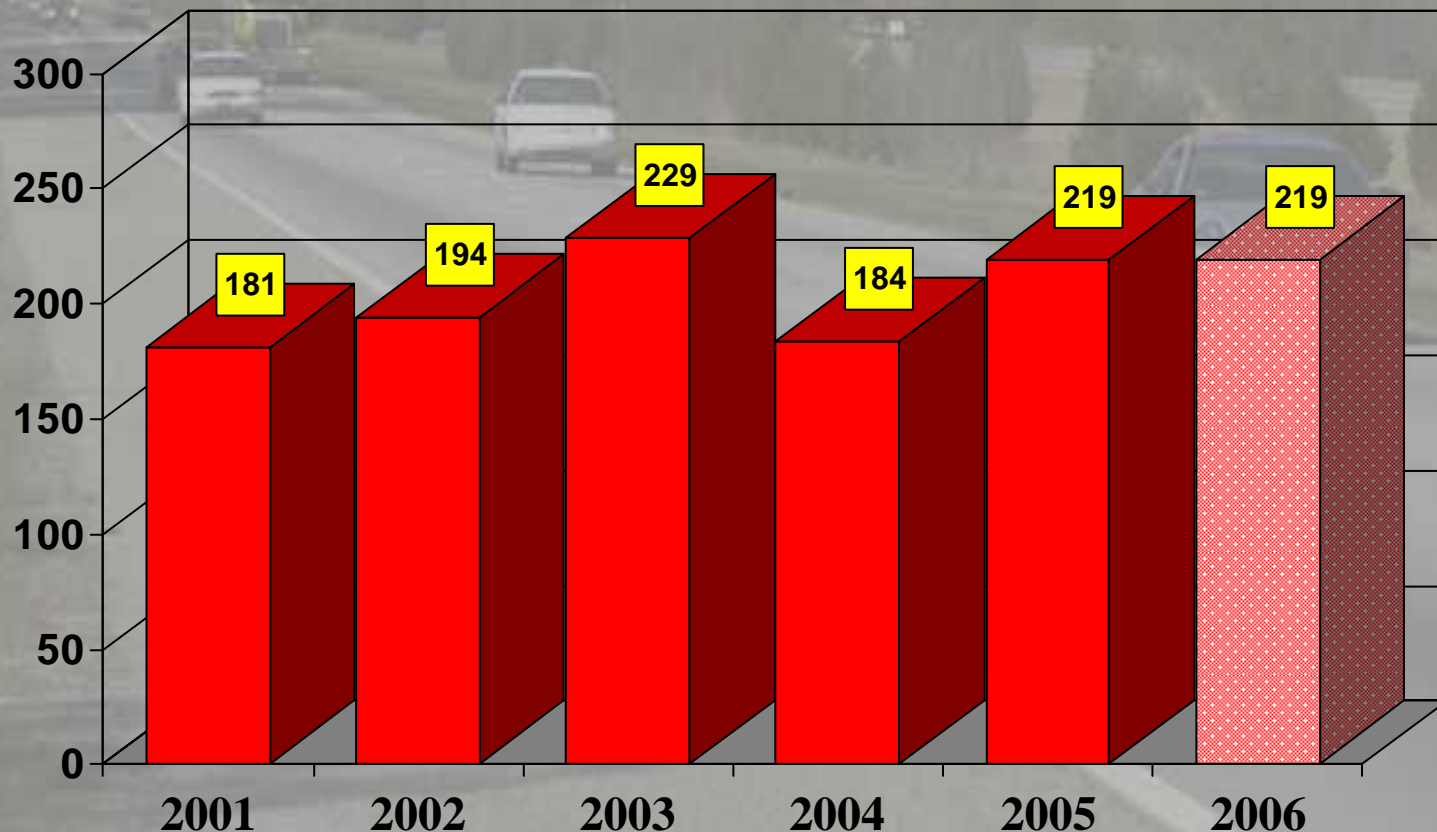
## Intersection Crashes



2006 figure is preliminary

# South Carolina Traffic Trends

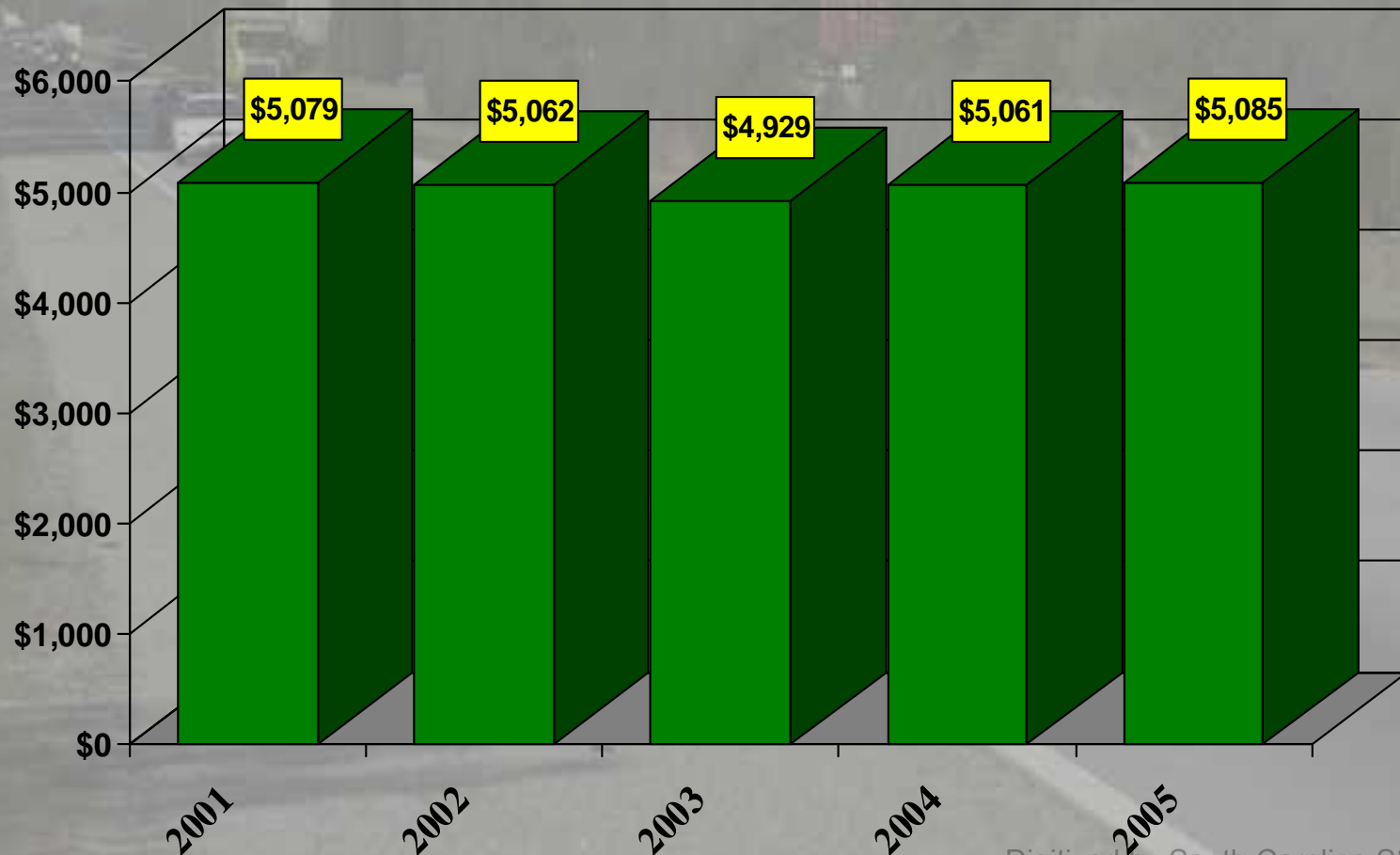
## Intersection Crash Fatalities



2006 figure is preliminary

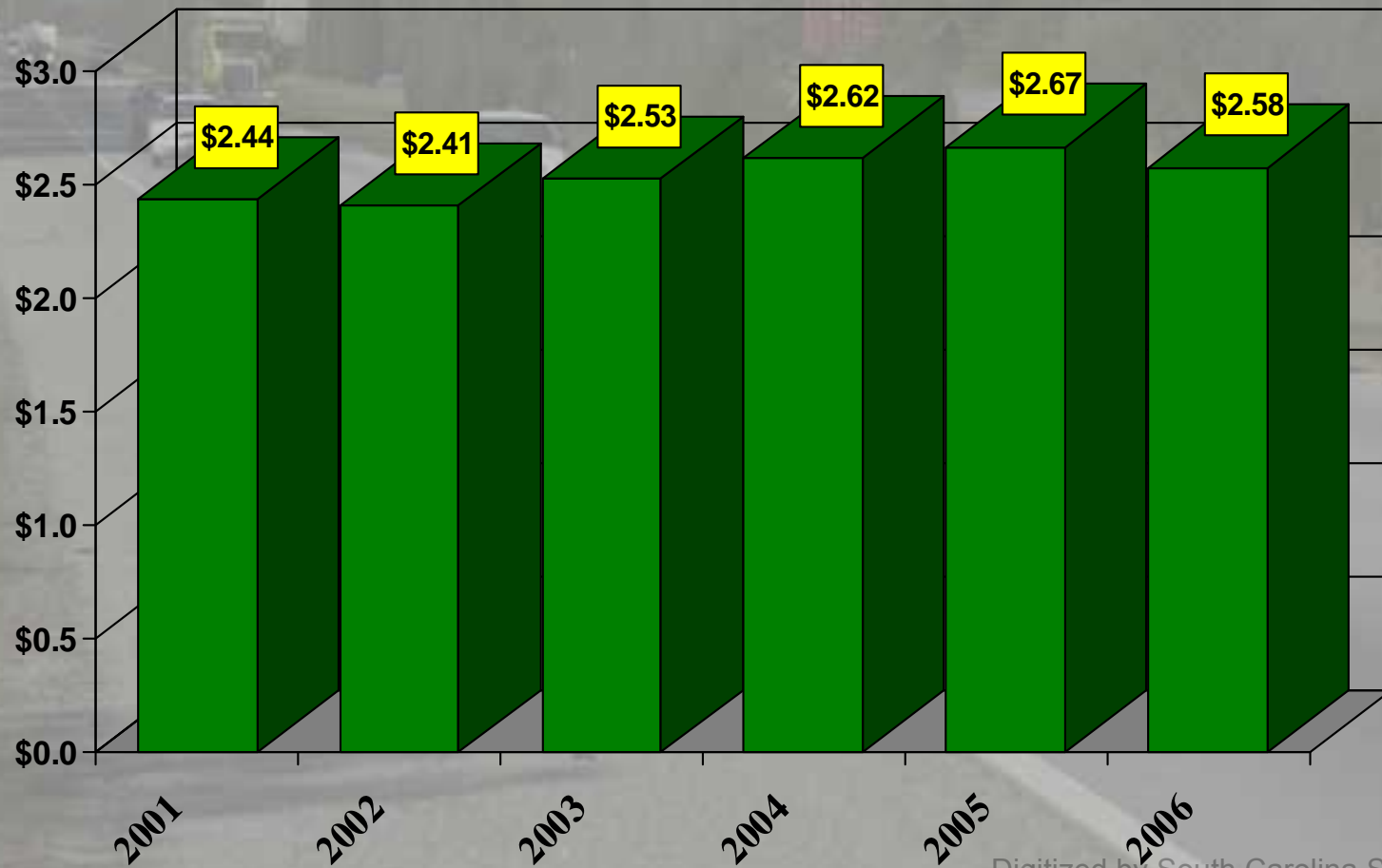
Digitized by South Carolina State Library

# Comprehensive Economic Loss (\$ millions) Resulting From Traffic Crashes in South Carolina



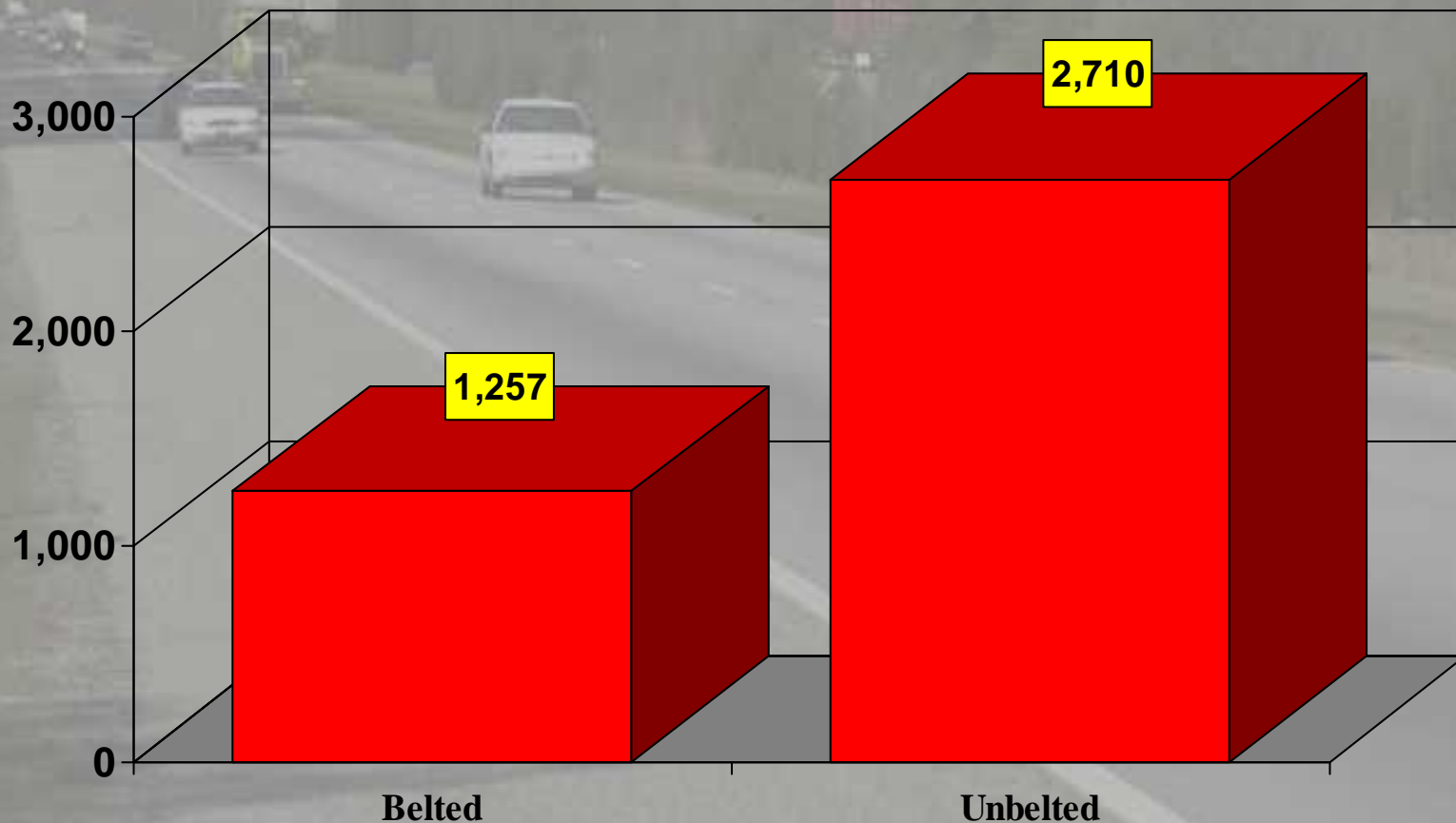


# Economic Loss (\$ billions) Resulting From Traffic Crashes in South Carolina



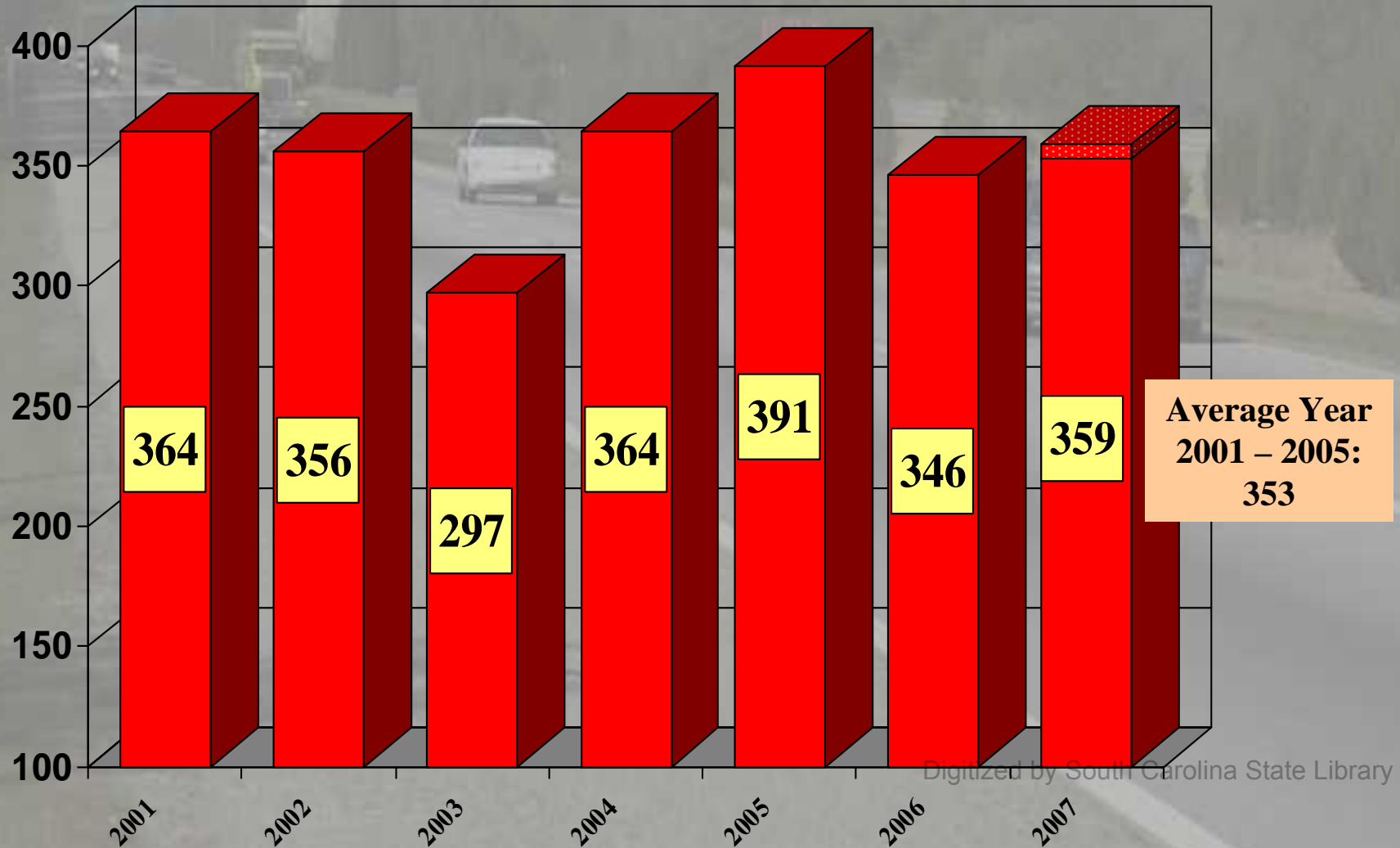
# South Carolina Traffic Trends

**Belt Usage of Vehicle Occupants Killed in Traffic Crashes  
(excludes occupants with unknown belt usage)  
2001 - 2005**



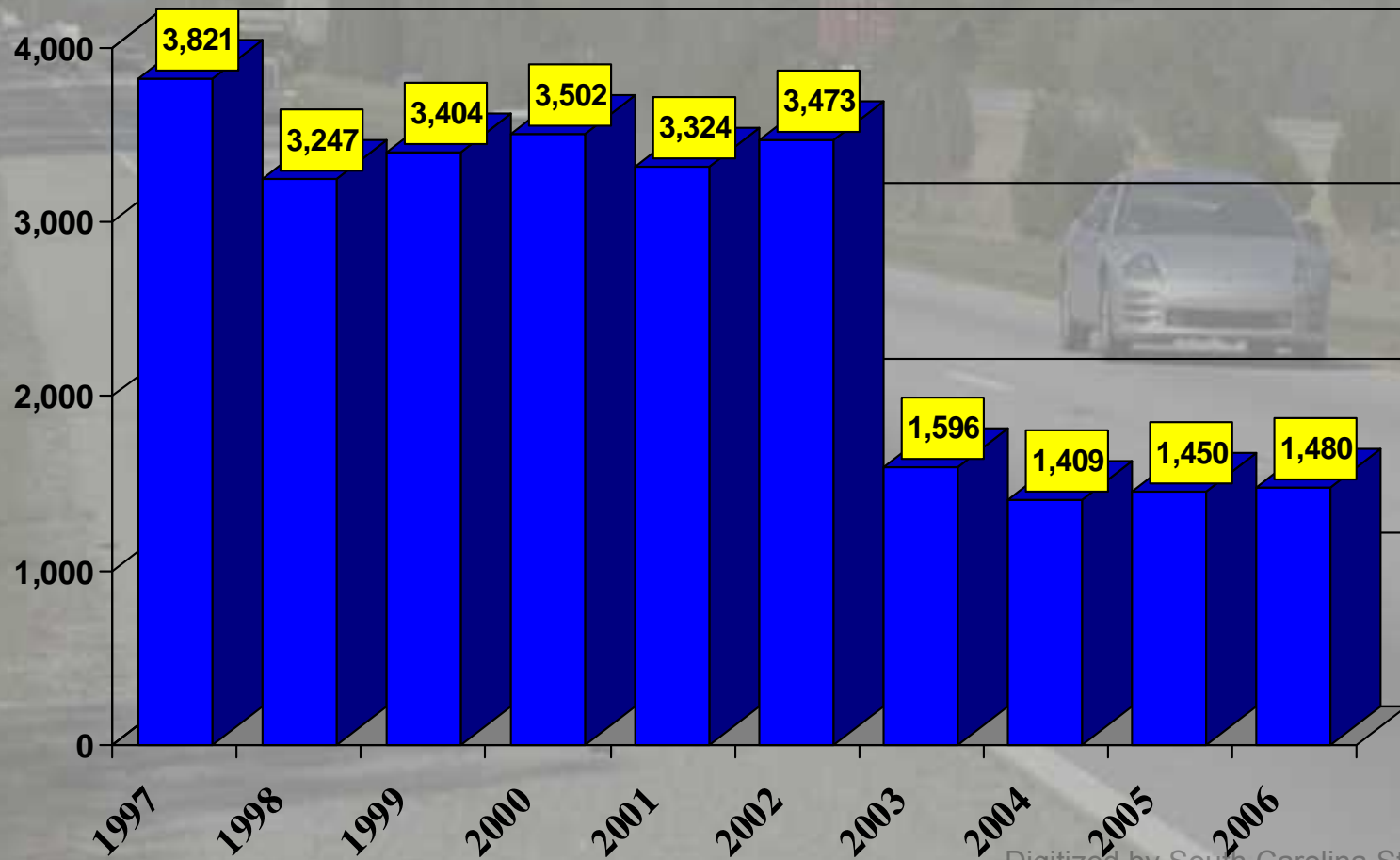
# South Carolina Traffic Fatalities

Through May 14 all Years



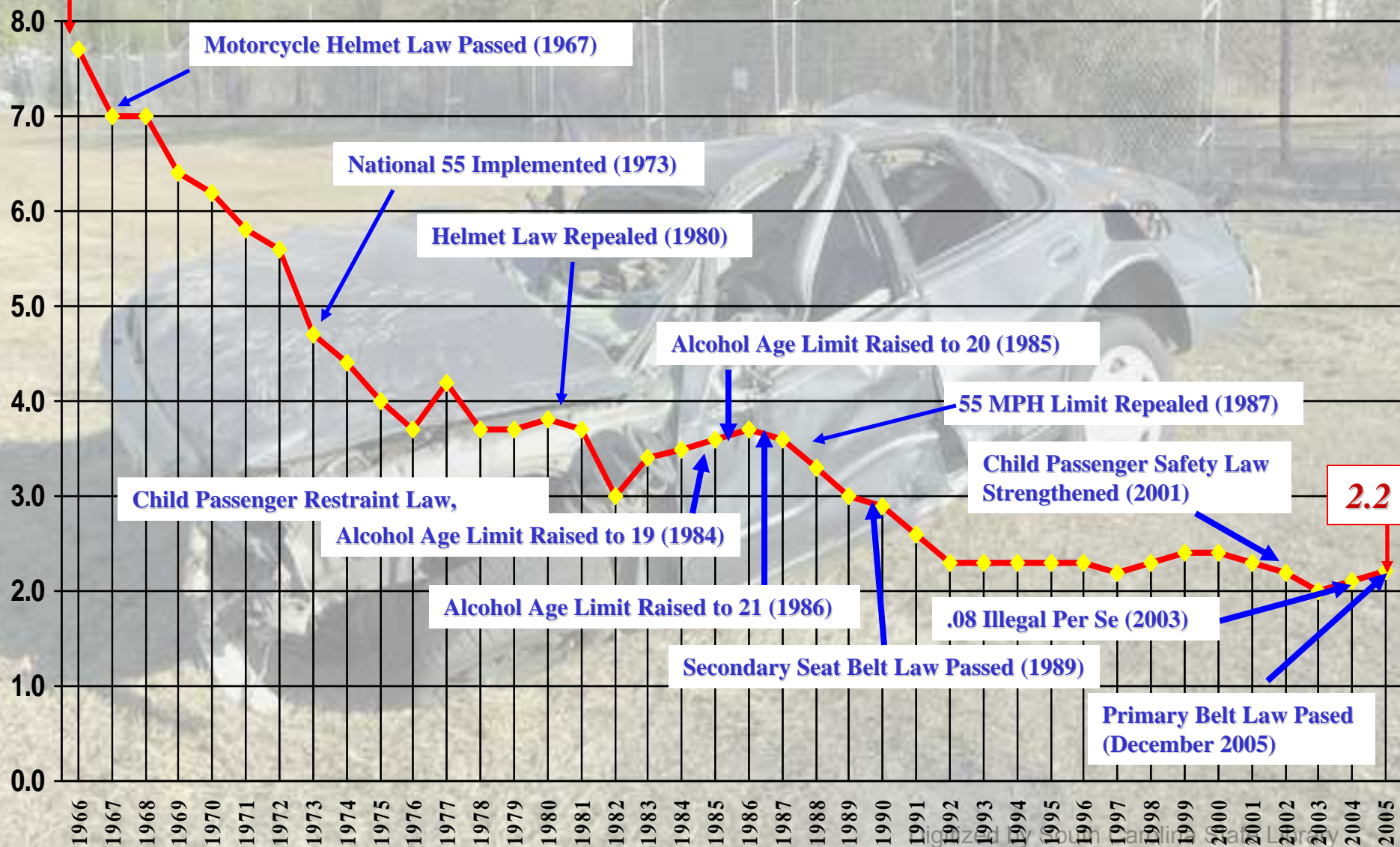
# South Carolina Traffic Crashes

## Deer Crashes



# South Carolina Mileage Death Rate

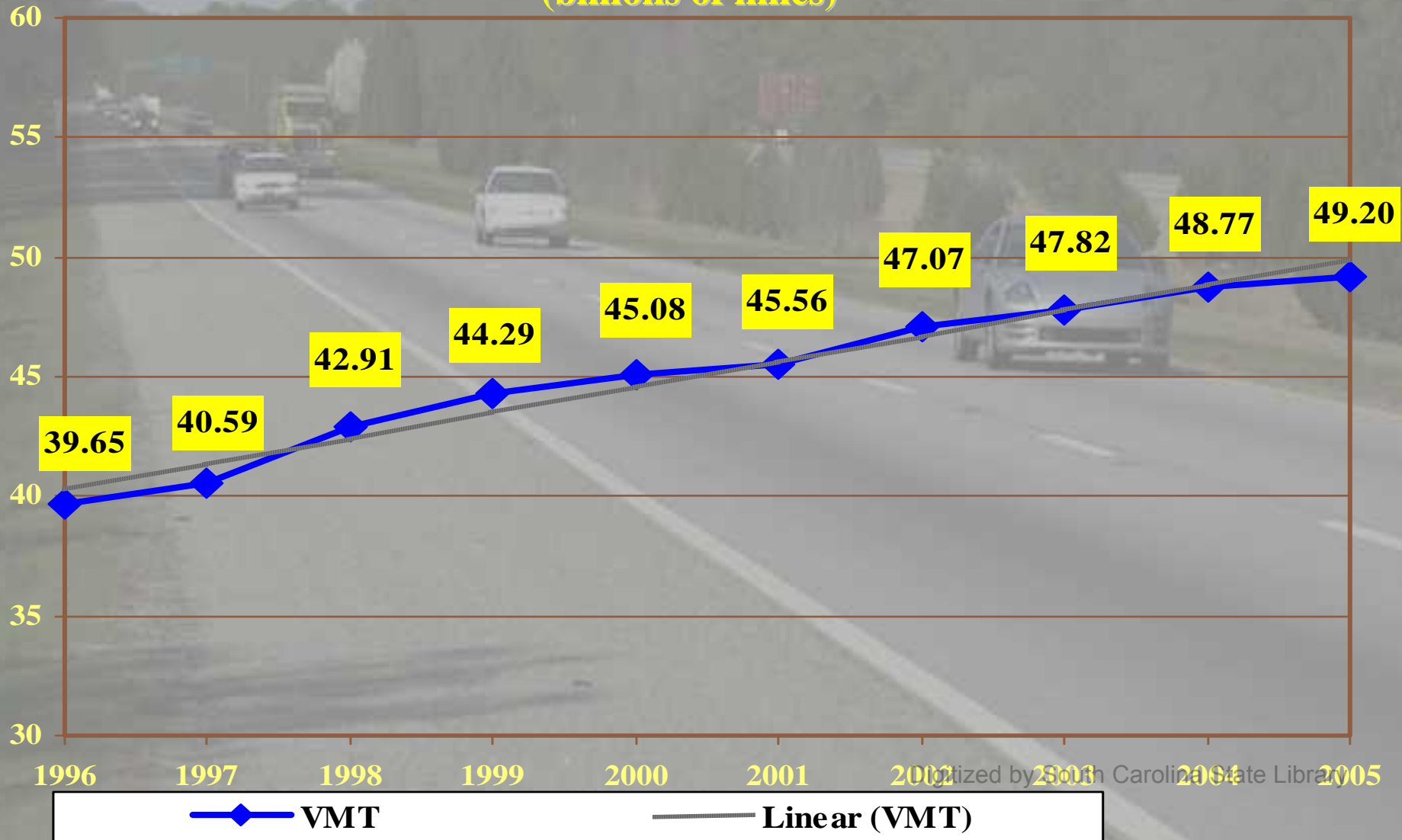
Traffic Deaths per 100 million Vehicle Miles Traveled



# South Carolina Traffic Trends

## Vehicle Miles of Travel

(billions of miles)

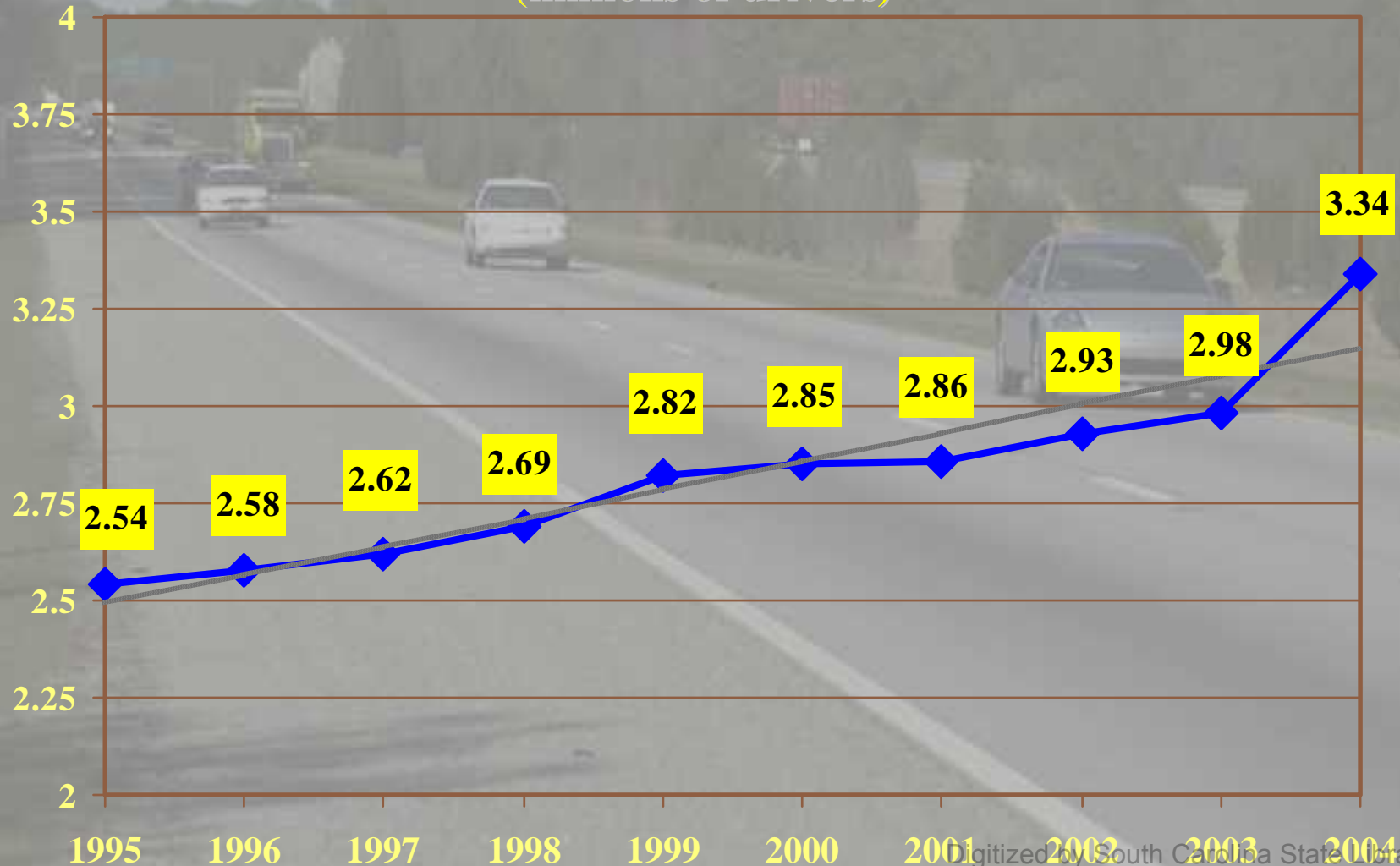




# South Carolina Traffic Trends

## Licensed Drivers

(millions of drivers)

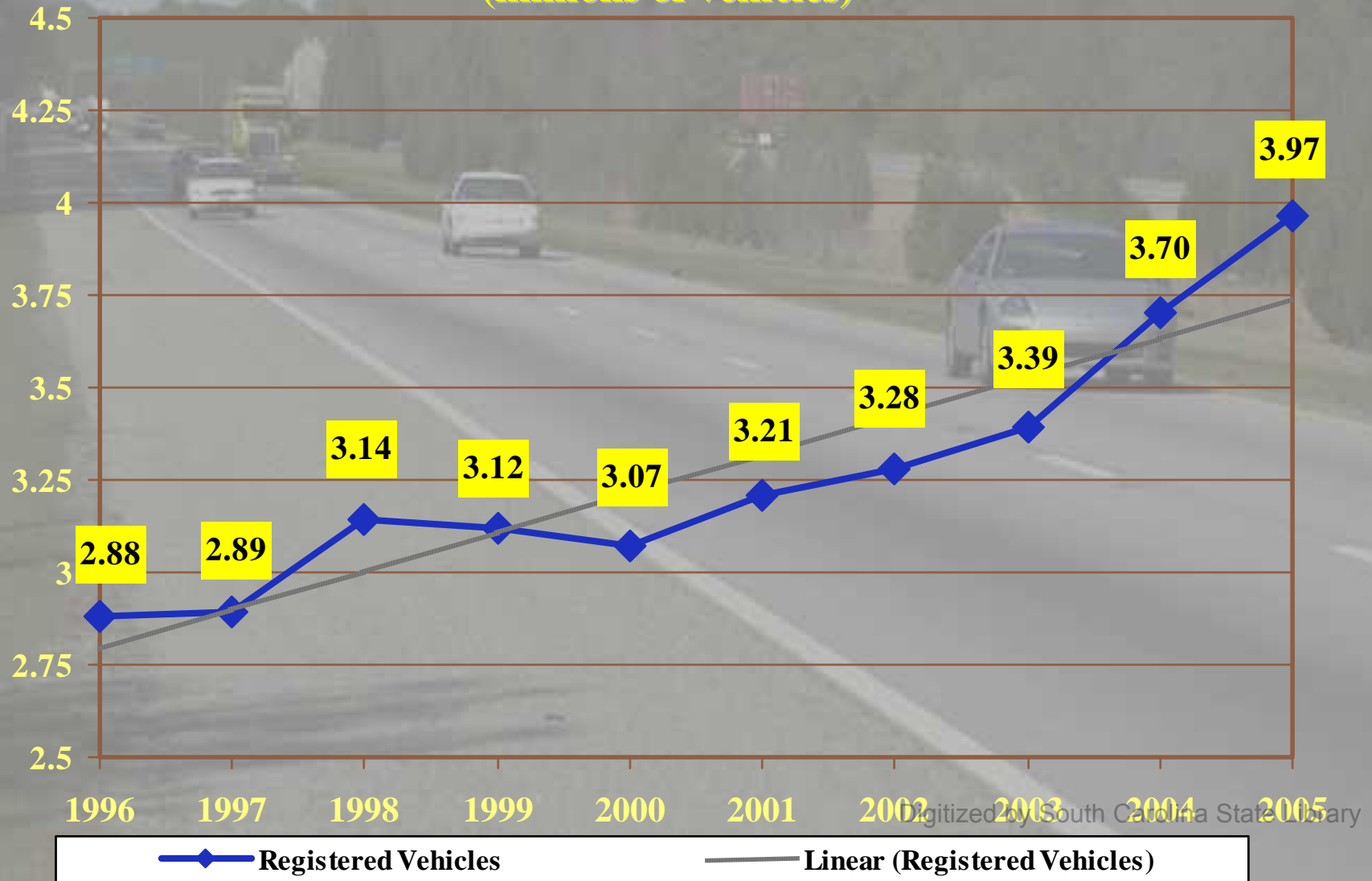


—◆— Licensed Drivers      — Linear (Licensed Drivers)

# South Carolina Traffic Trends

## Registered Vehicles

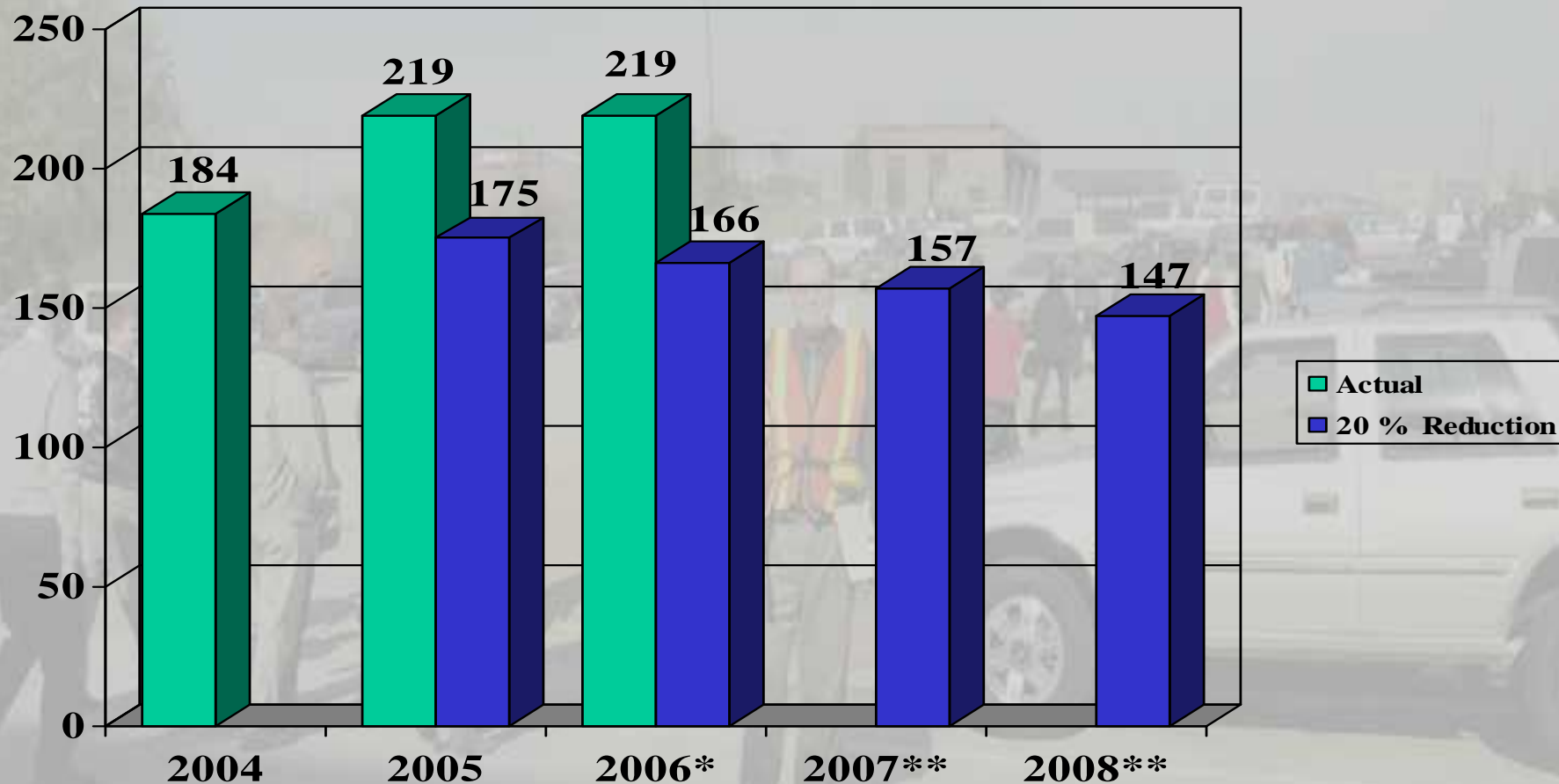
(millions of vehicles)



# South Carolina Crashes

## Fatalities in Intersection Crashes

Based on Junctions Types: Crossover, 5 point, T or Y

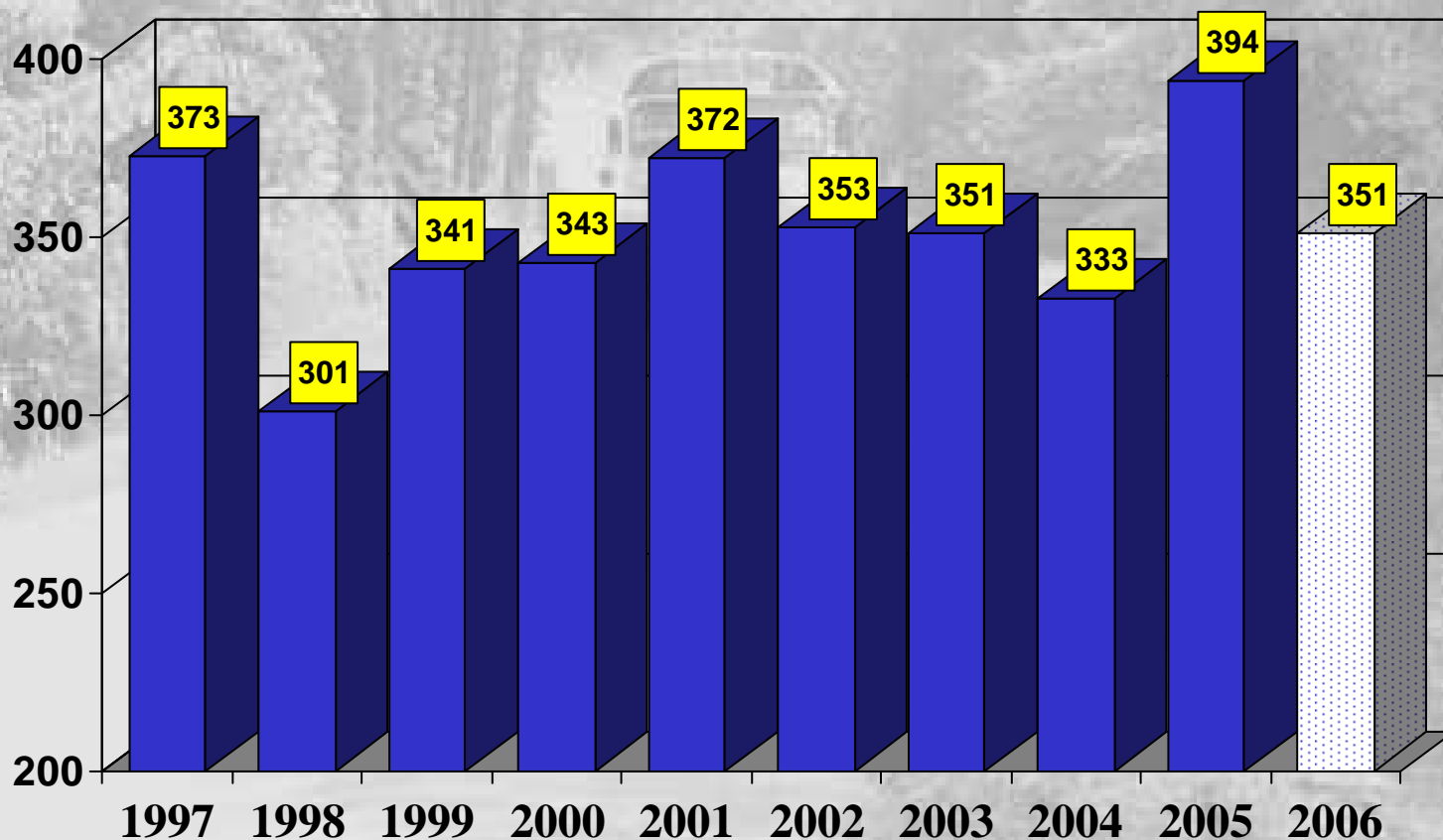


\* Actual Figure is preliminary

\*\* Projected totals to achieve goal

# South Carolina Crashes

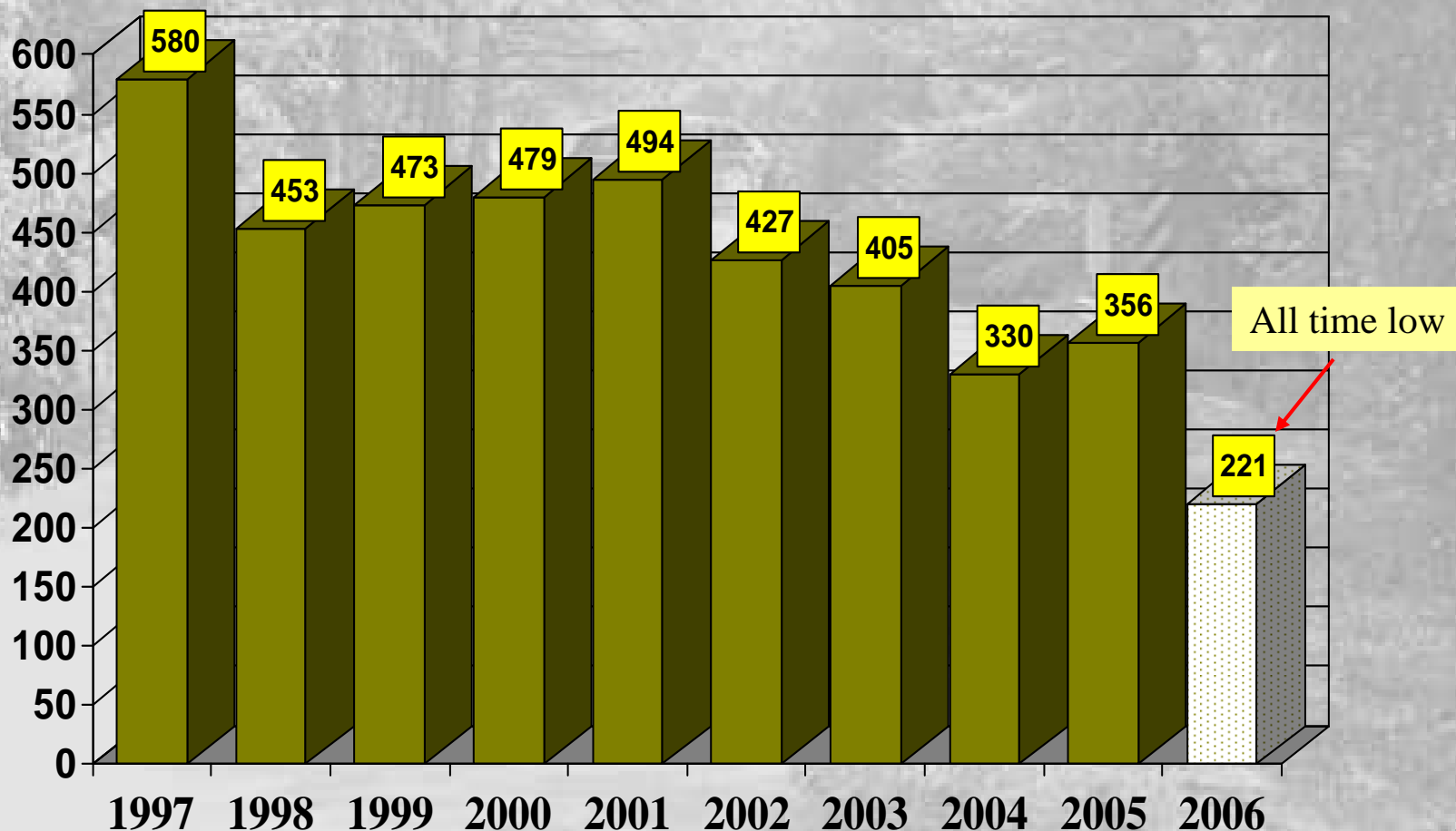
## Crashes Involving School Buses



2006 figure is preliminary

# South Carolina Crashes

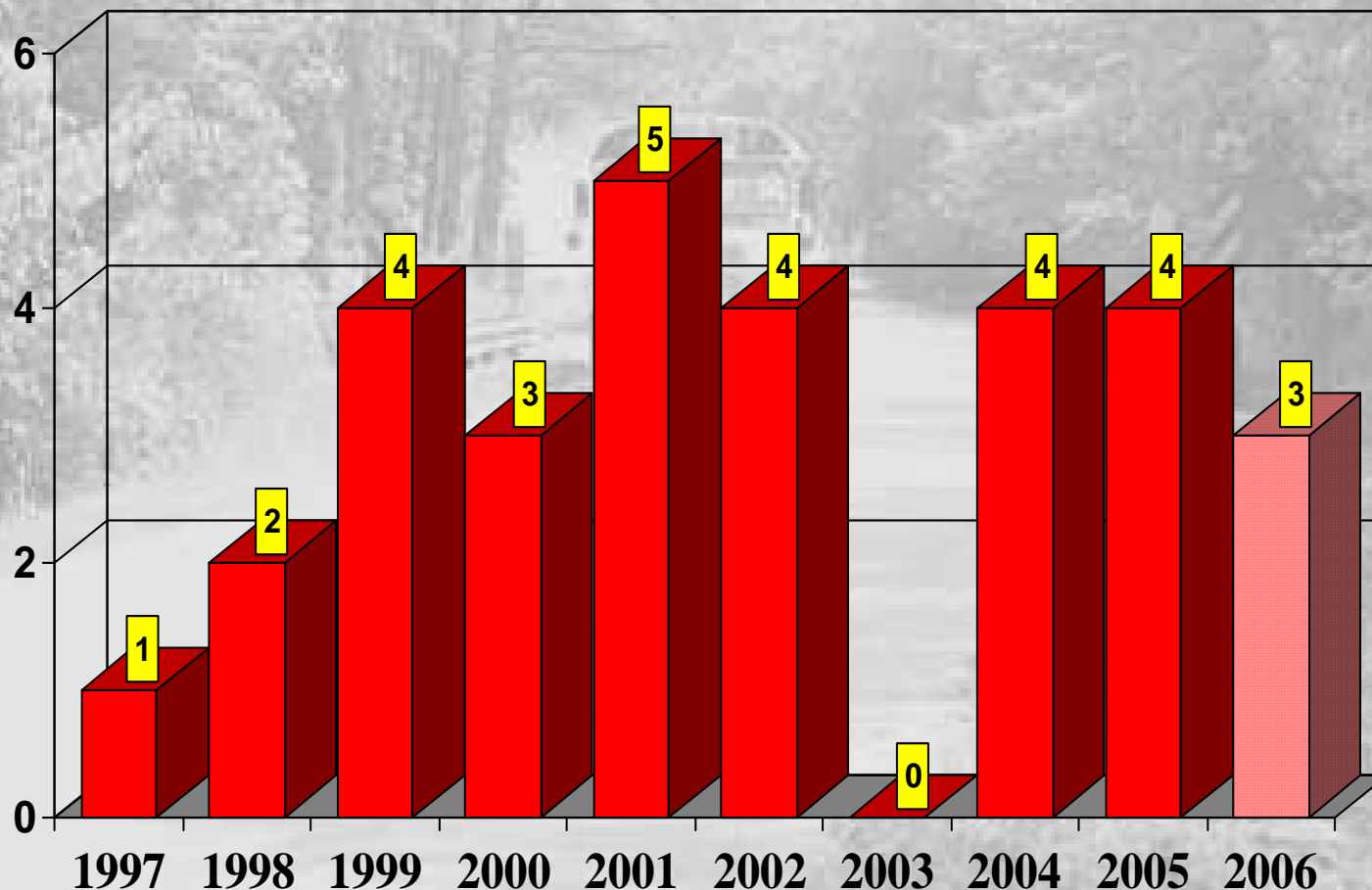
## Injuries in Crashes Involving School Buses



2006 figure is preliminary

# South Carolina Crashes

## Fatalities in Crashes Involving School Buses

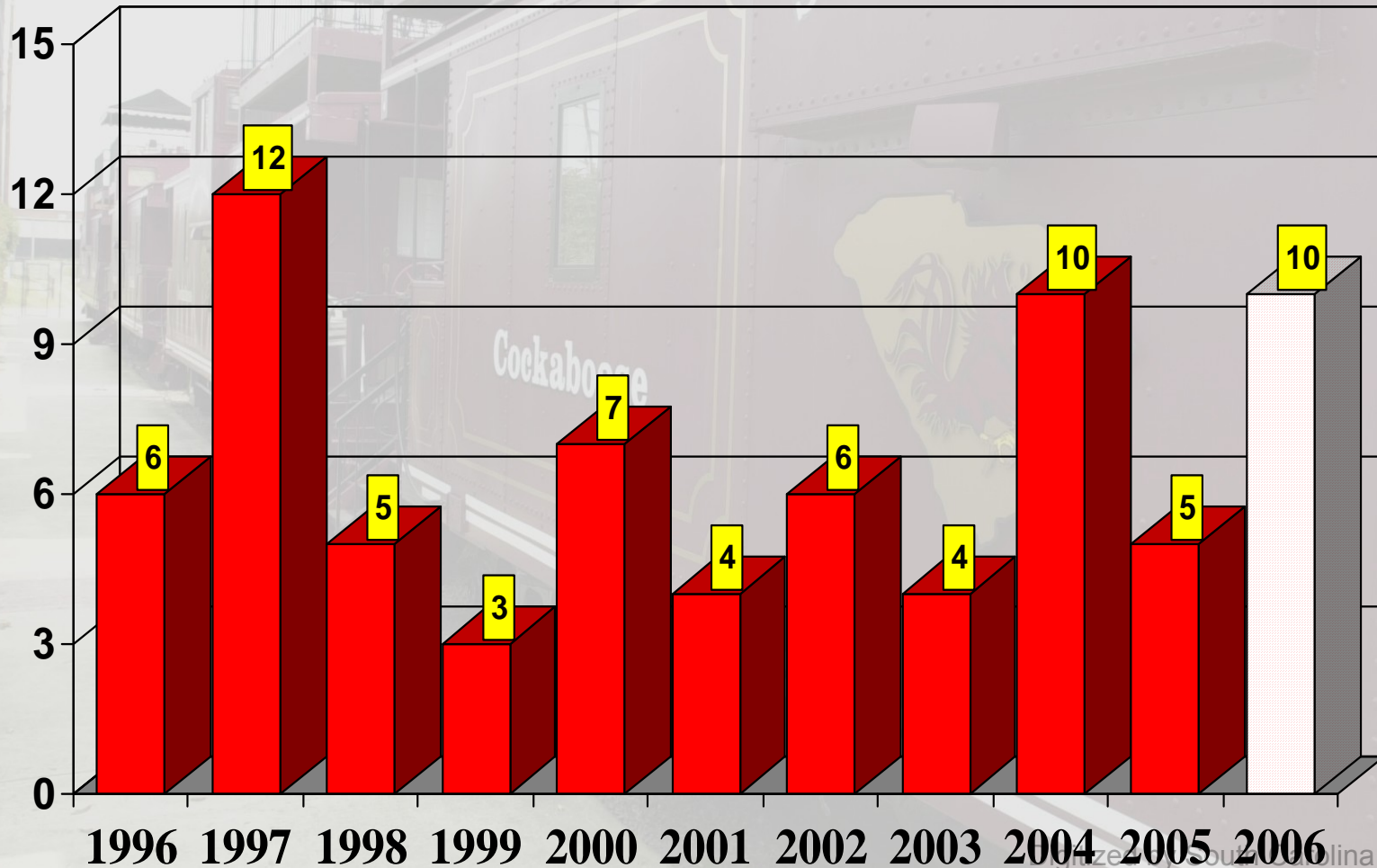


2006 figure is preliminary



# South Carolina Crashes

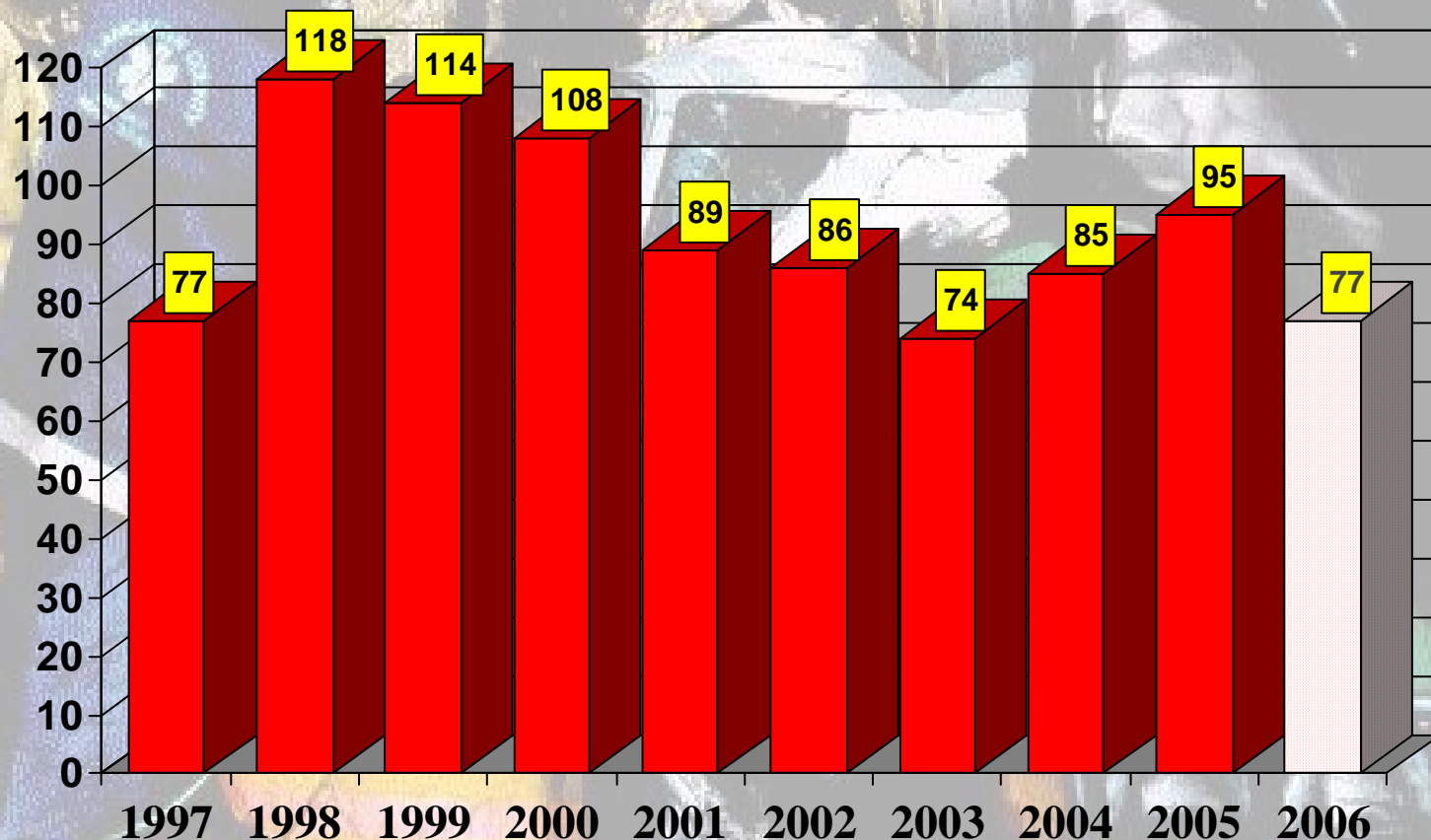
## Fatalities in Collisions Involving Railway Trains



2006 figure is Preliminary

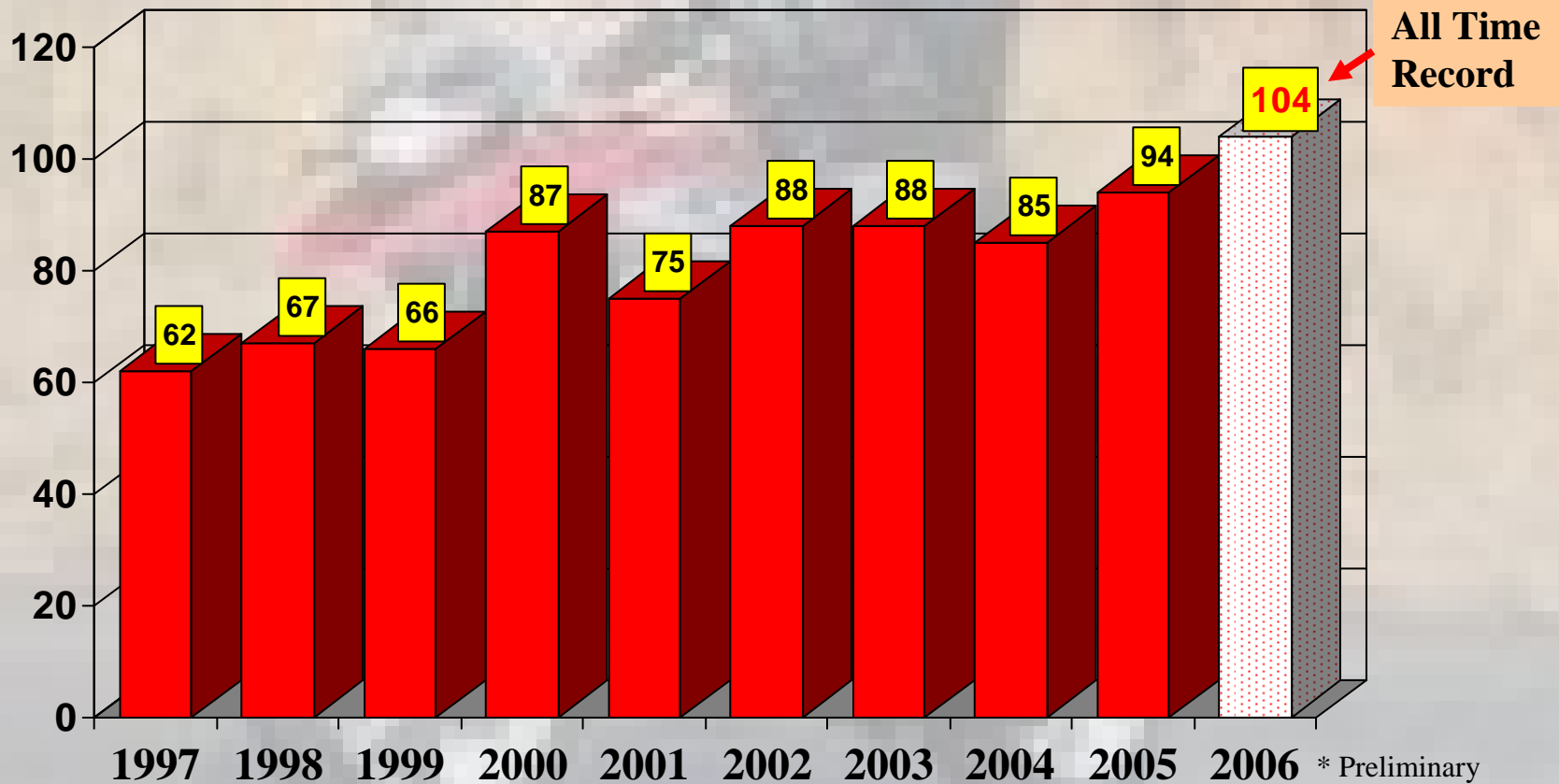
# South Carolina Traffic Fatalities

## Fatalities in Collisions Involving Truck Tractors



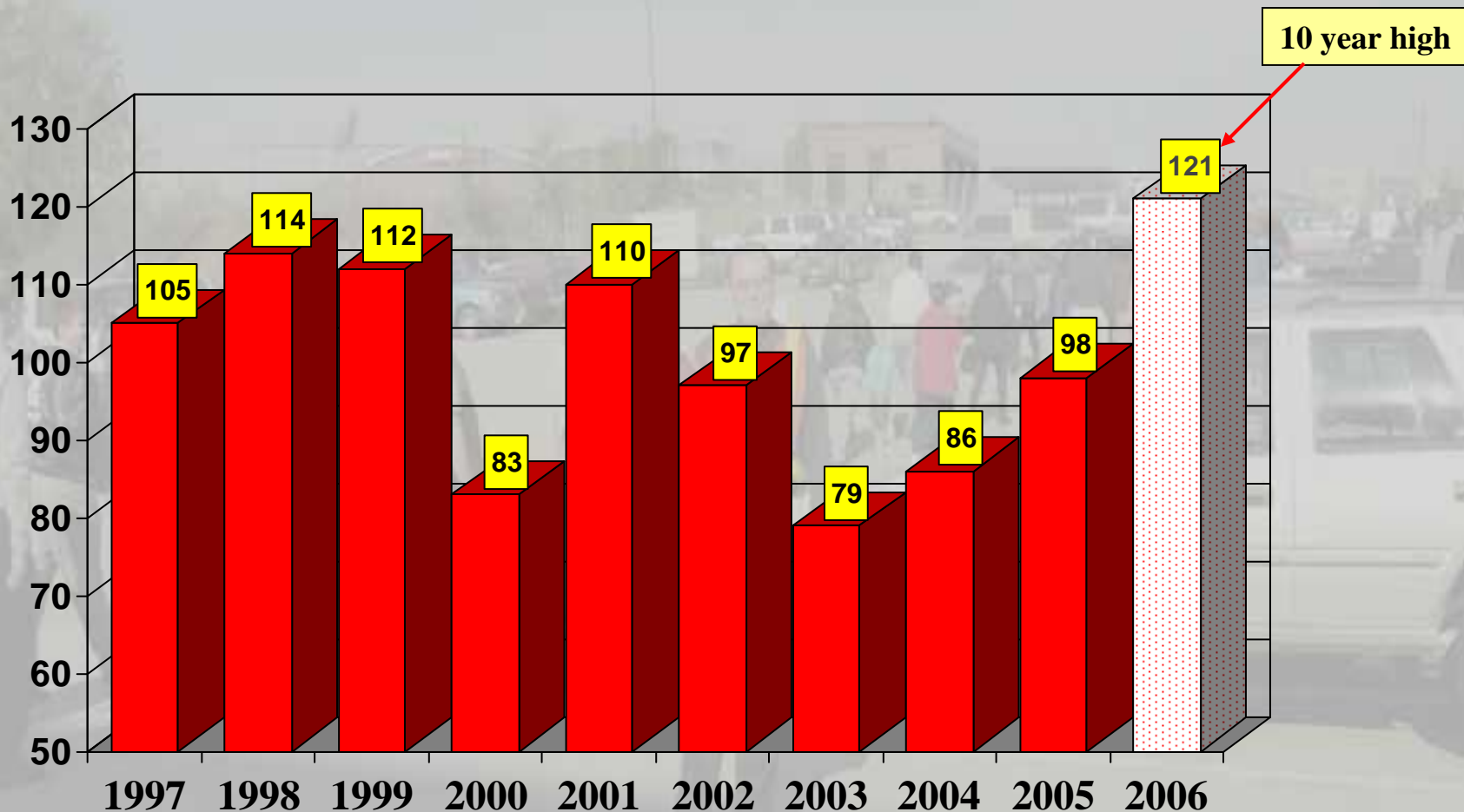
2006 figure is preliminary

# South Carolina Traffic Fatalities Involving Motorcycles



# South Carolina Crashes

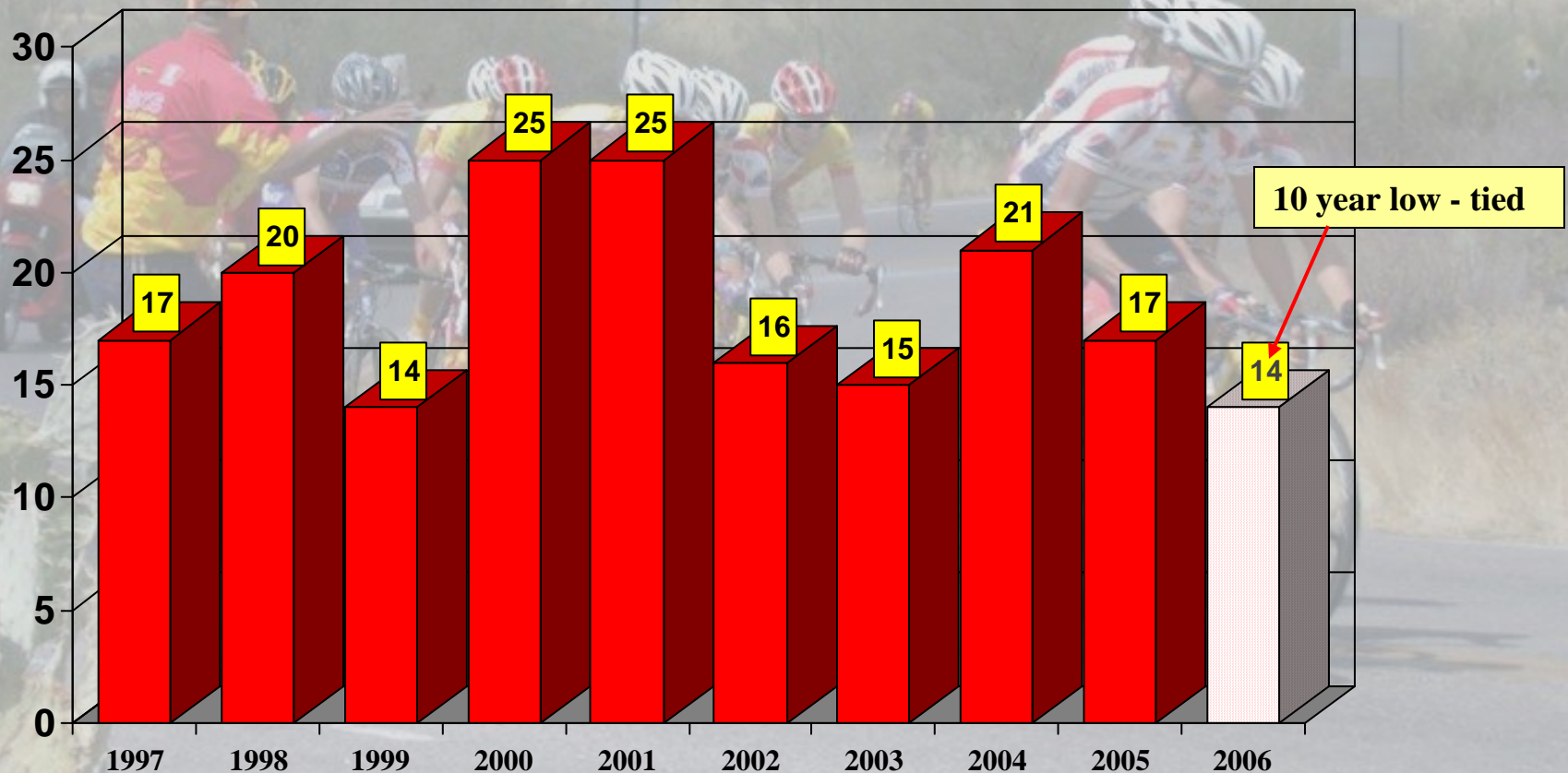
## Fatalities in Collisions Involving Pedestrians



2006 figure is preliminary

# South Carolina Traffic Trends

## Traffic Fatalities Involving Pedalcyclists

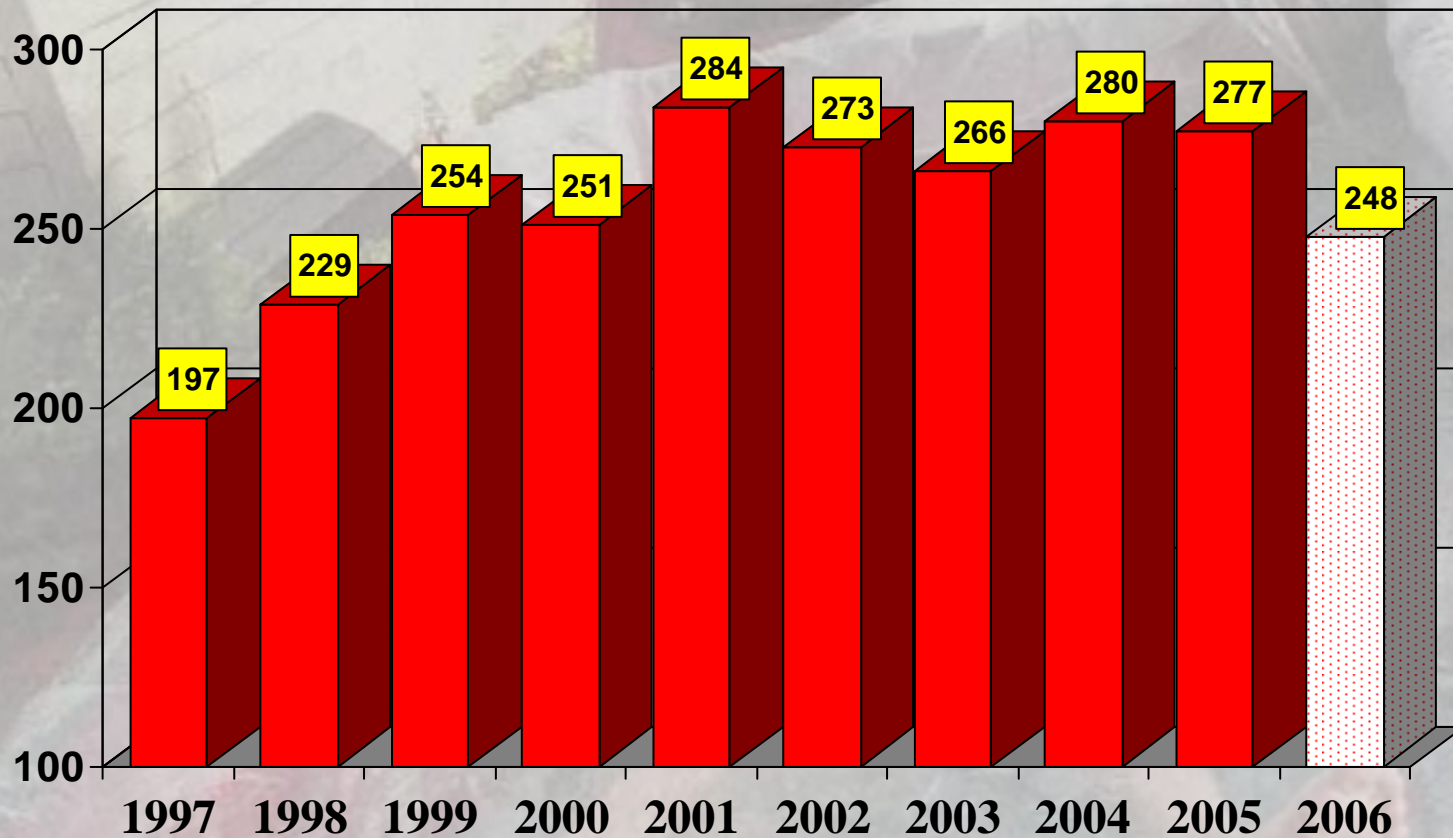


2006 figure is preliminary



# South Carolina Traffic Trends

## Fatalities in Collisions Involving Pickups

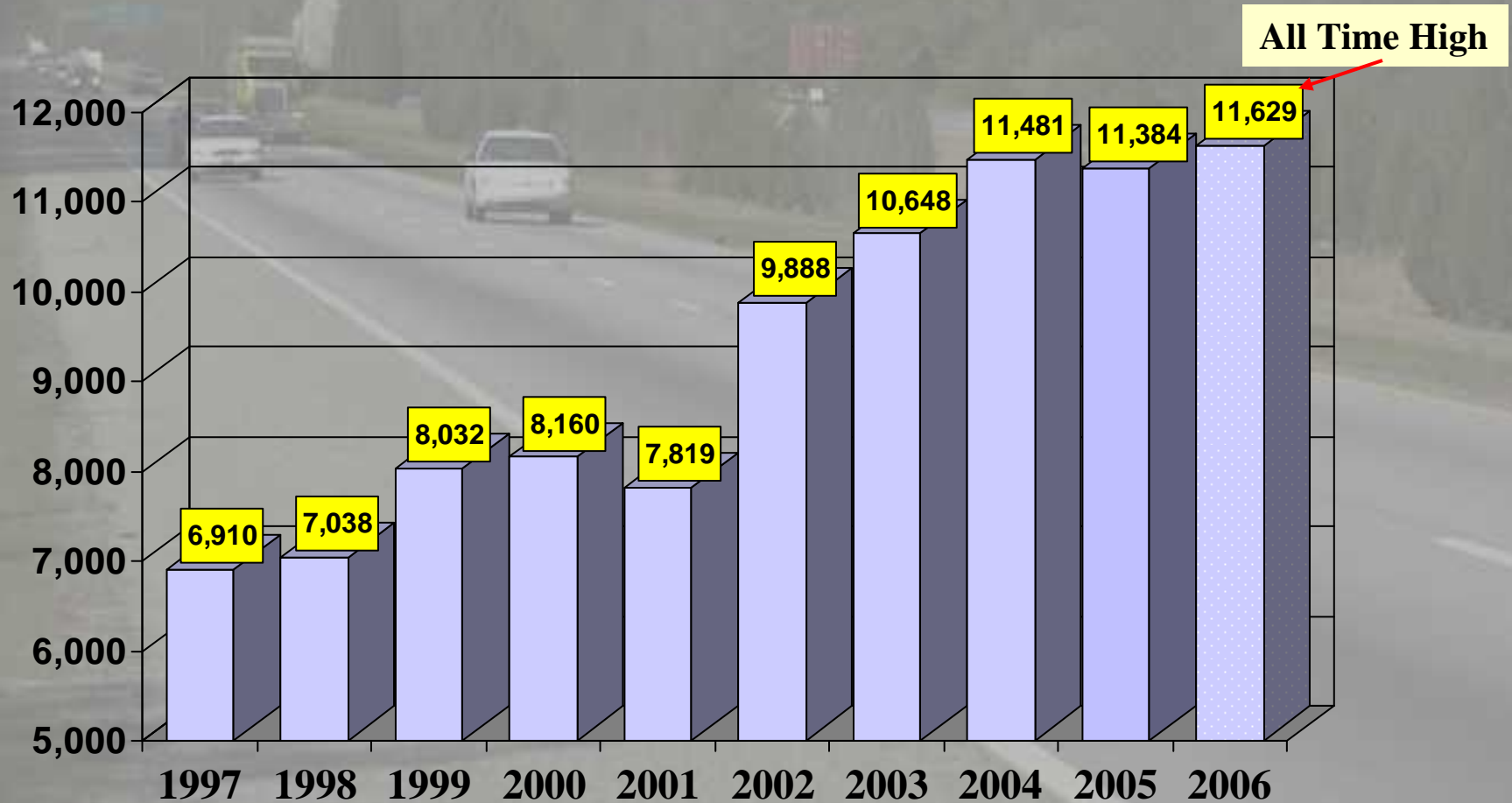


2006 figure is preliminary



# South Carolina Traffic Trends

## Traffic Collisions on Interstate Highways

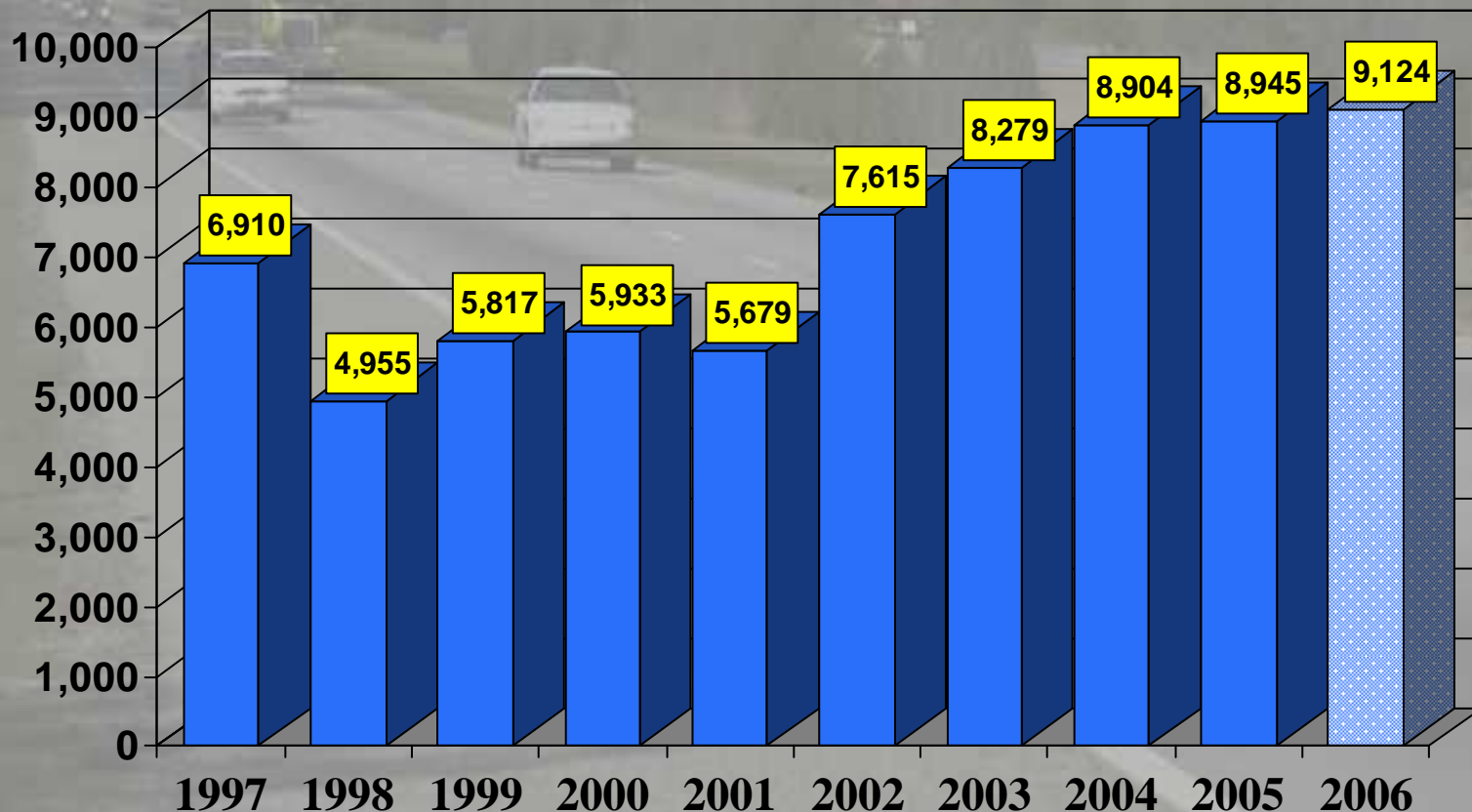


2006 figure is preliminary

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# South Carolina Traffic Trends

## PDO Crashes on Interstate Highways

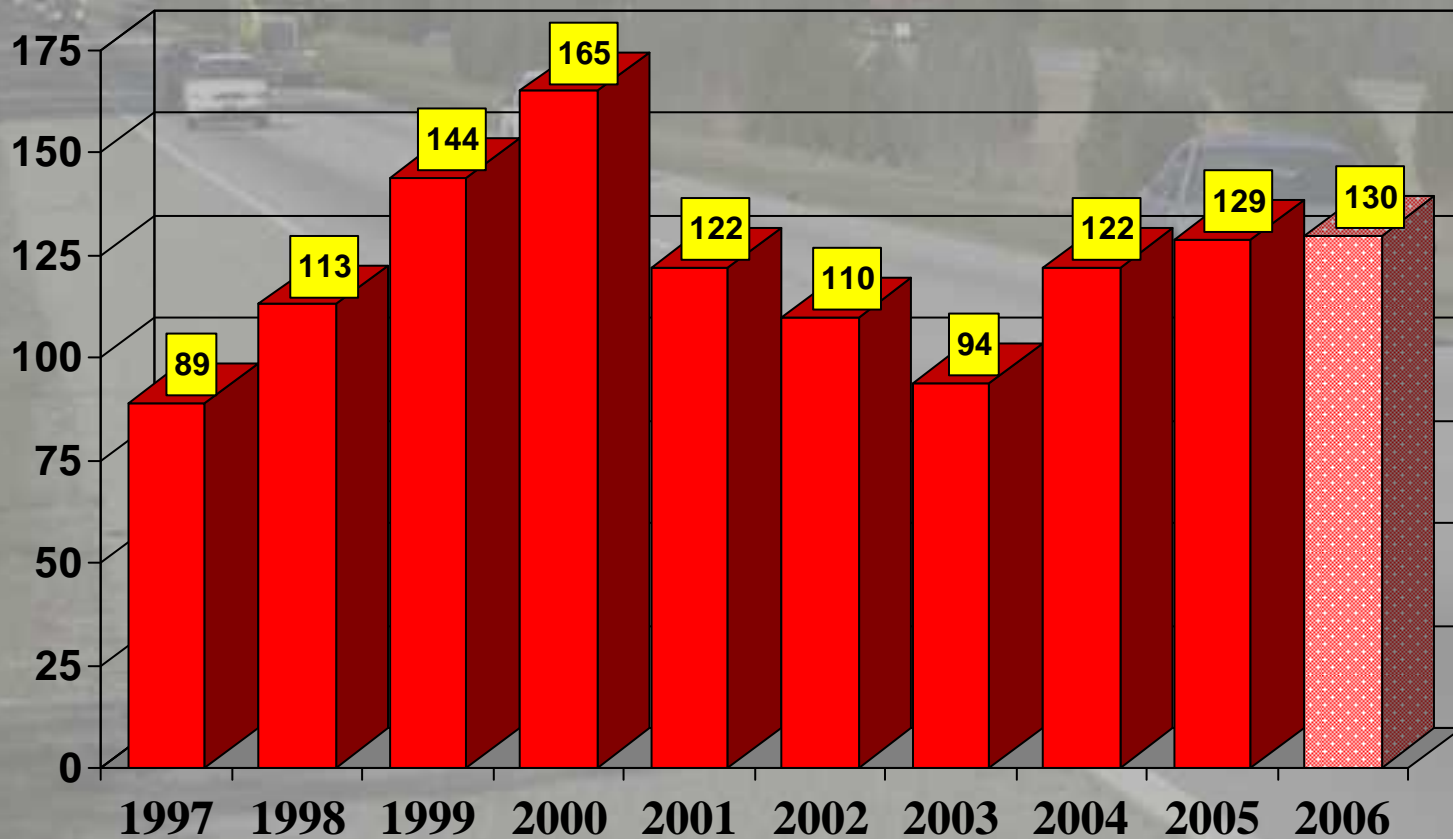


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2006 figure is preliminary

# South Carolina Traffic Trends

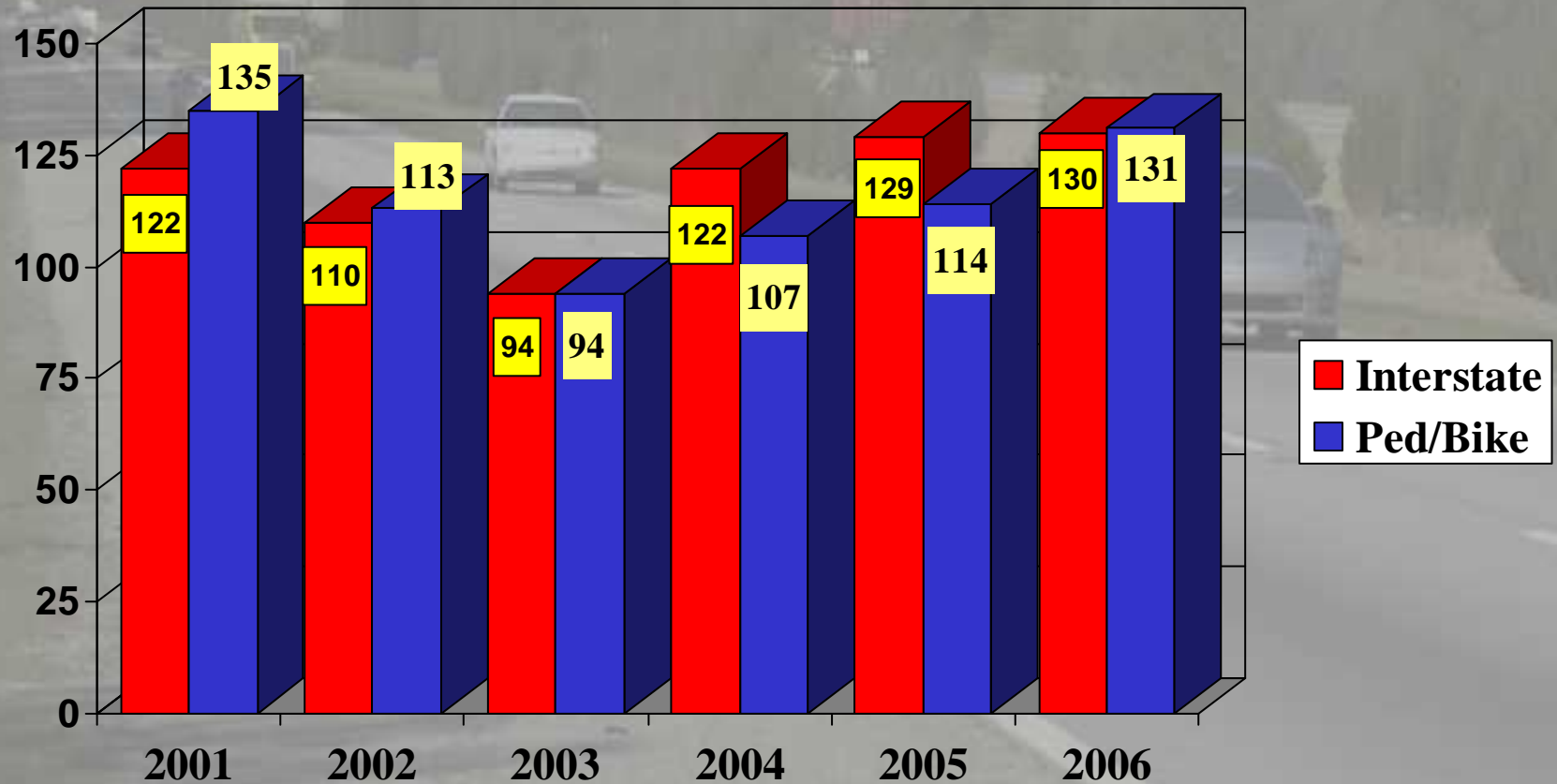
## Traffic Fatalities on Interstate Highways



2006 figure is preliminary

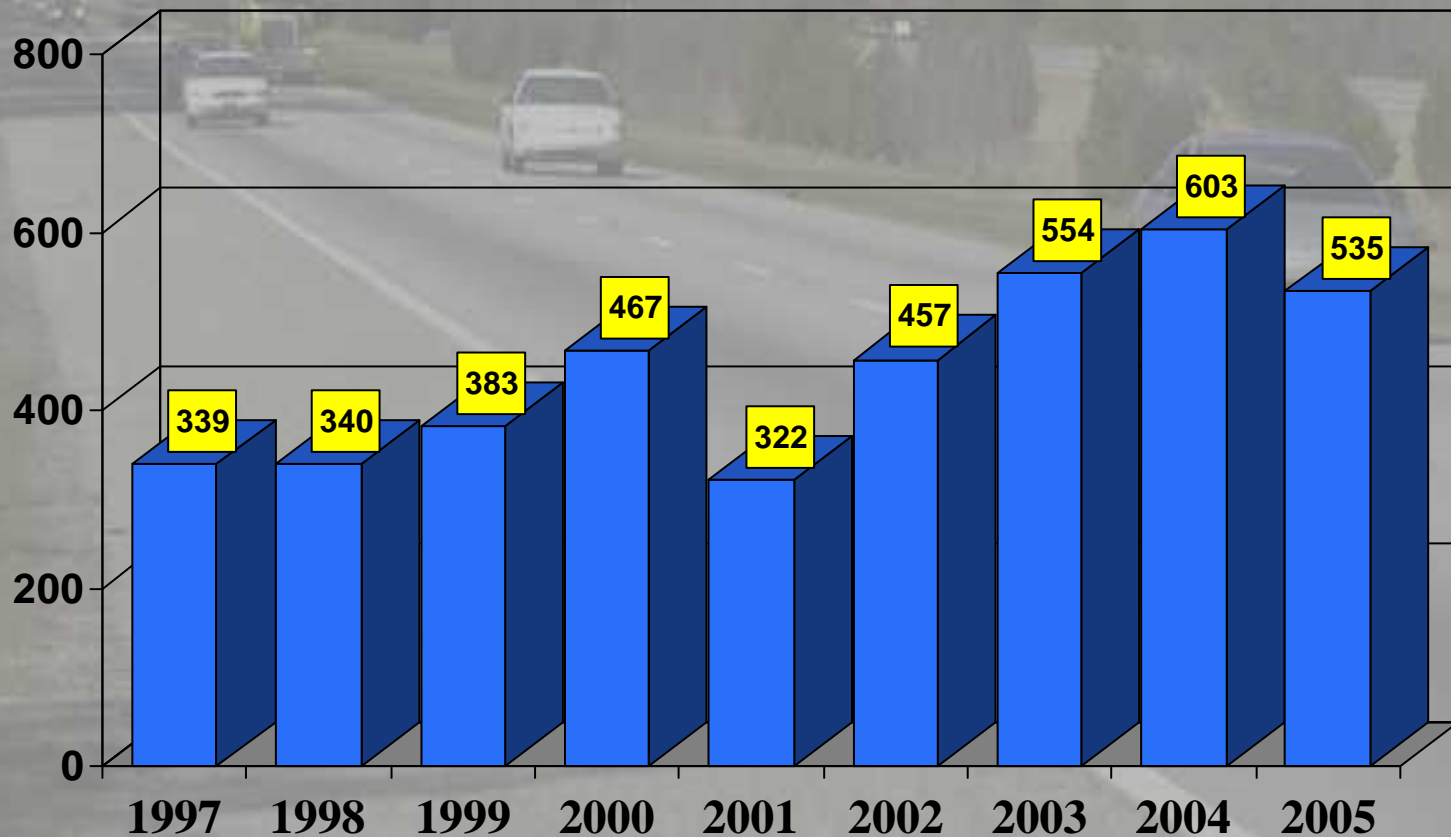
# South Carolina Traffic Trends

## Fatalities on Interstates vs. Ped/Bike



# South Carolina Traffic Trends

## Guardrail Crashes on Interstate Highways



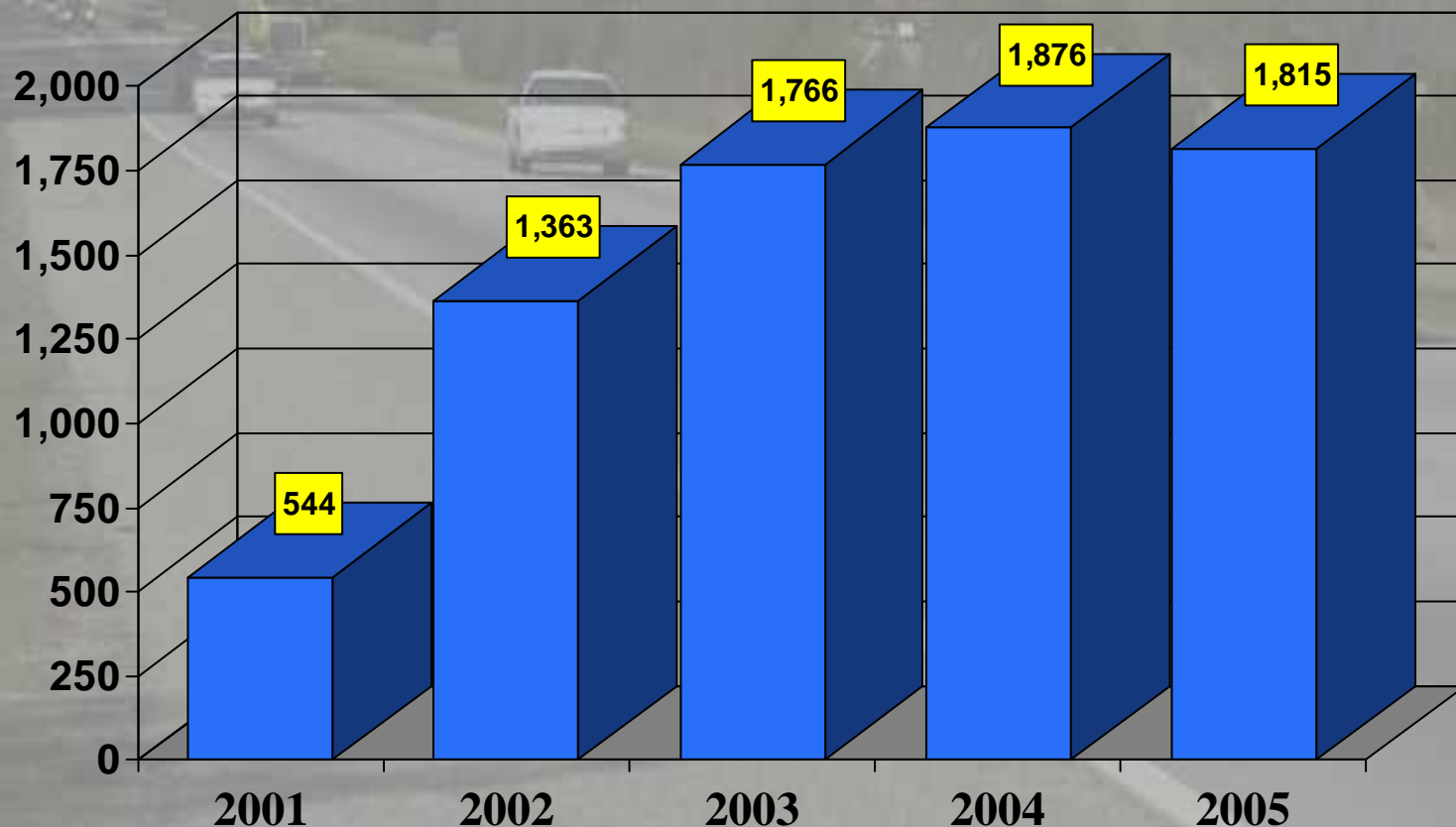
Source: SCDPS

2005 figures are preliminary

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# South Carolina Traffic Trends

## Median Barrier Crashes on Interstate Highways



Source: SCDPS

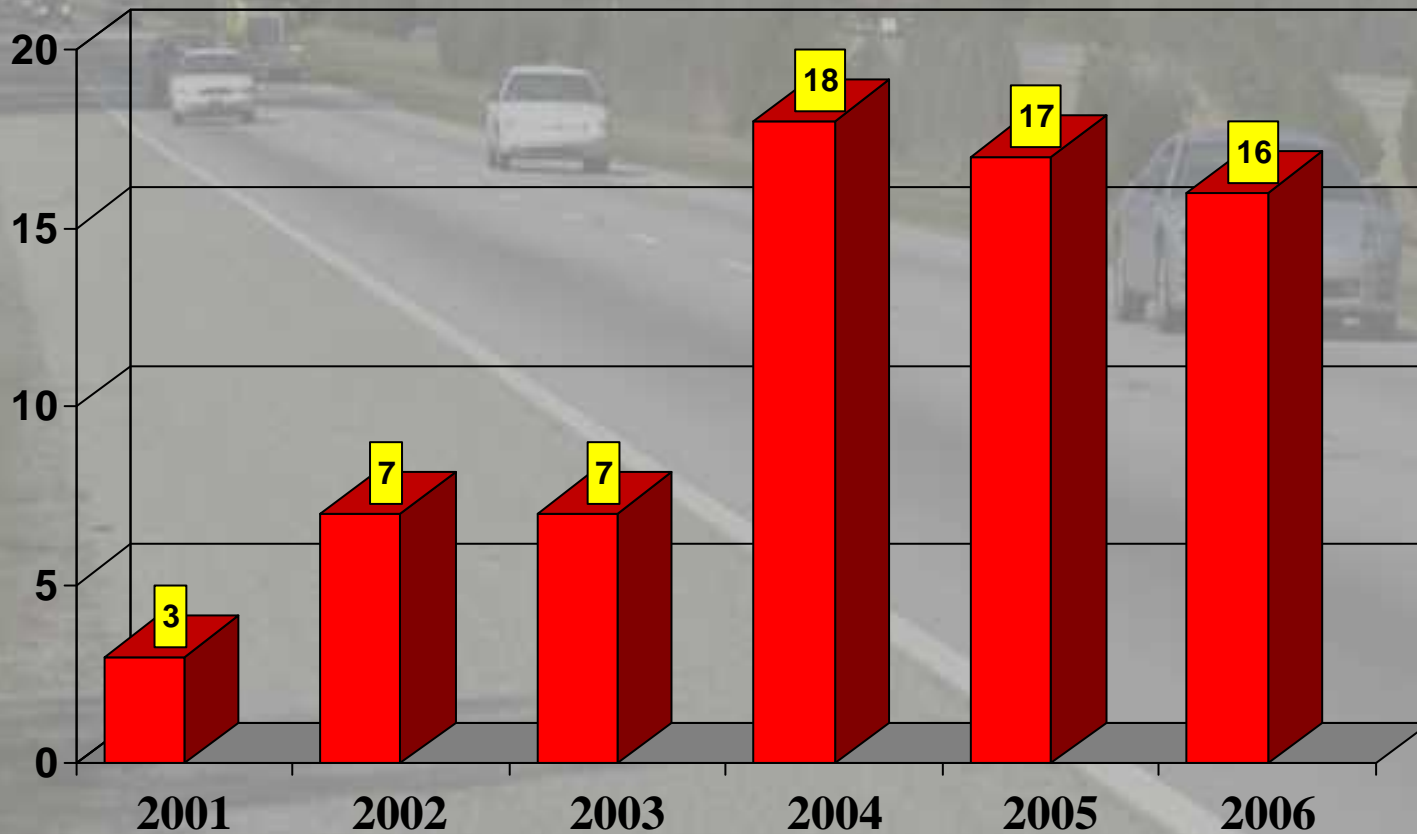
2005 figures are preliminary

Digitized by South Carolina State Library



# South Carolina Traffic Trends

## Median Barrier Fatalities on Interstate Highways

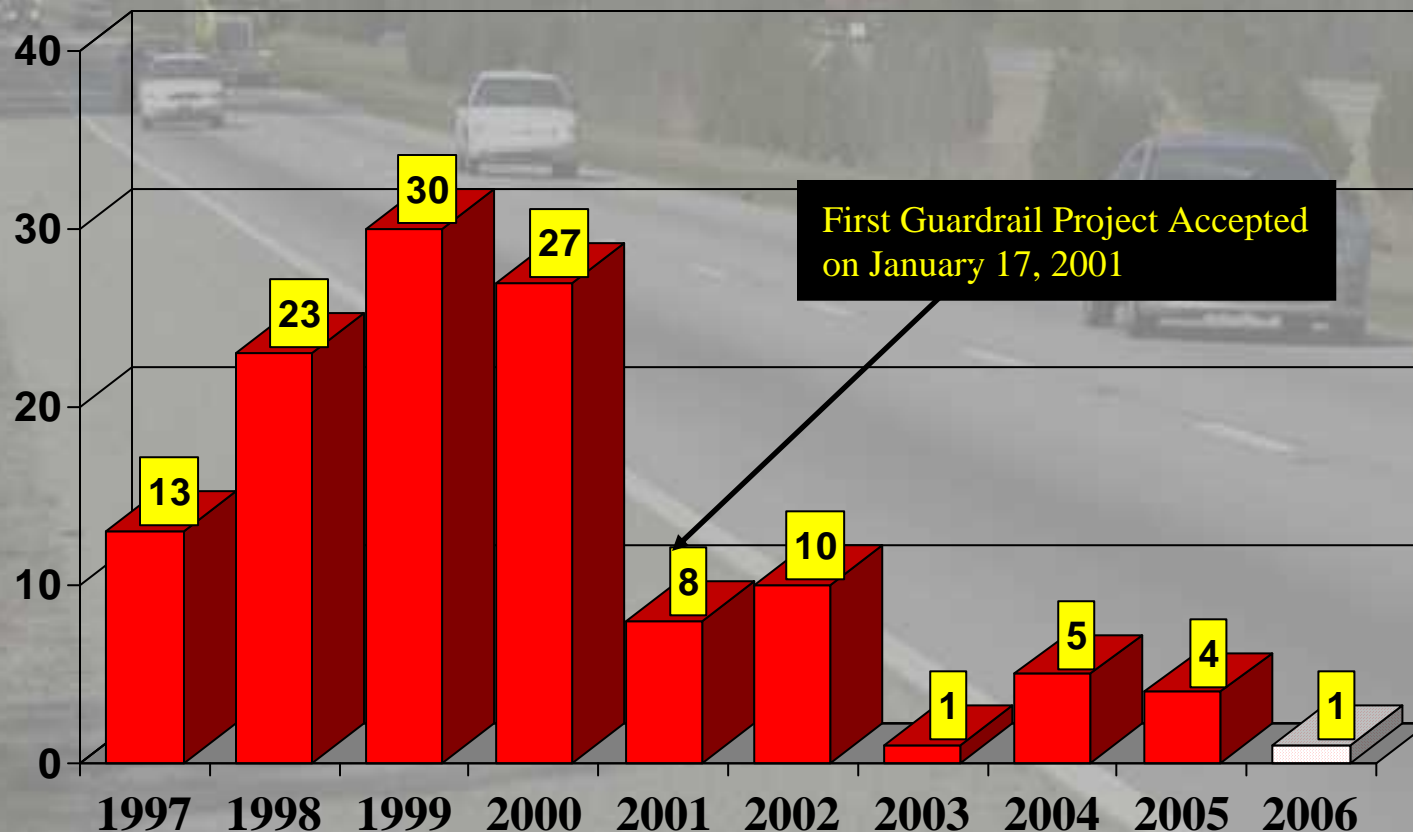


2006 figure is preliminary

Digitized by South Carolina State Library

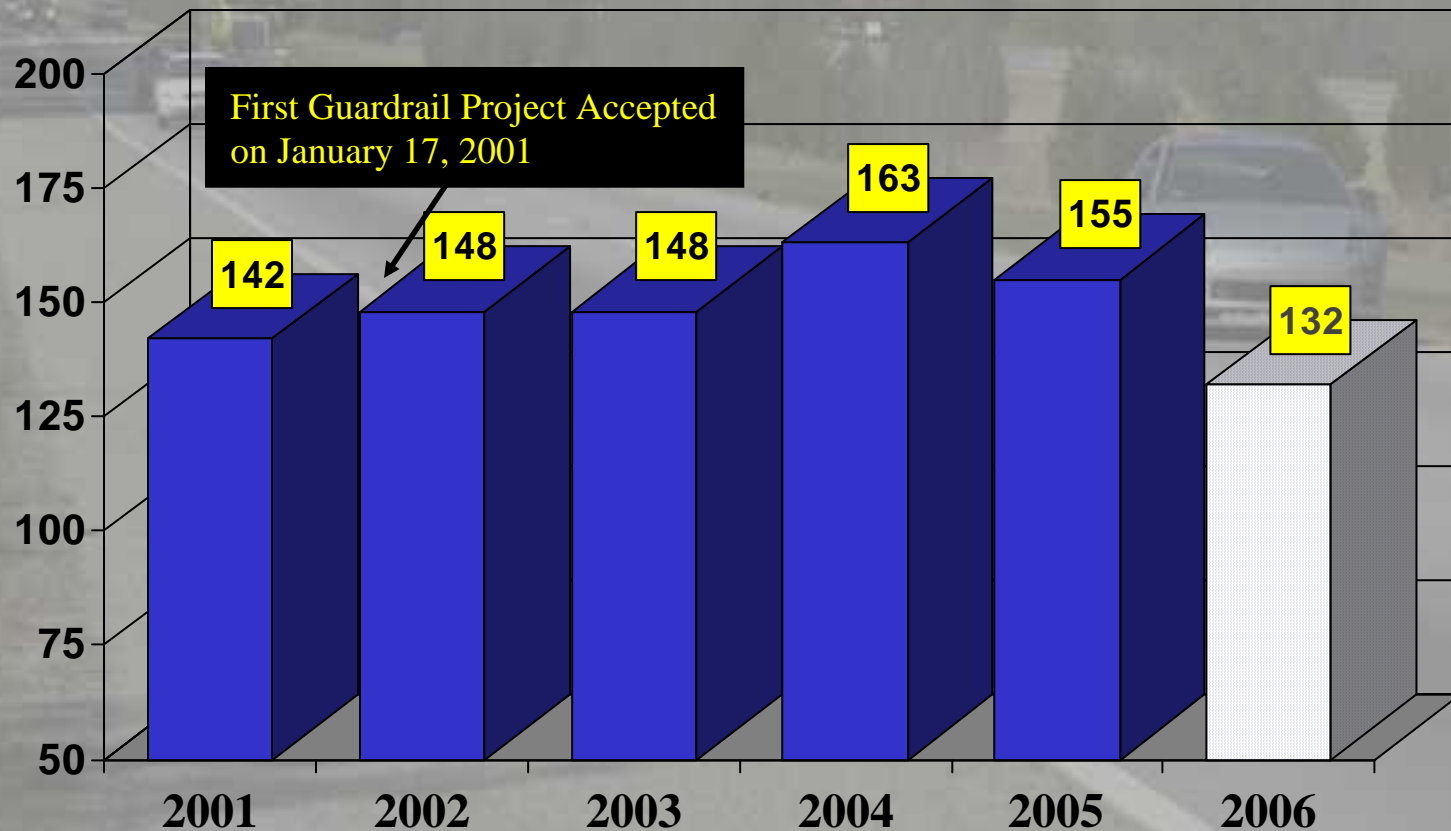
# South Carolina Traffic Trends

## Interstate Median Crossover Fatalities



2006 figure is preliminary

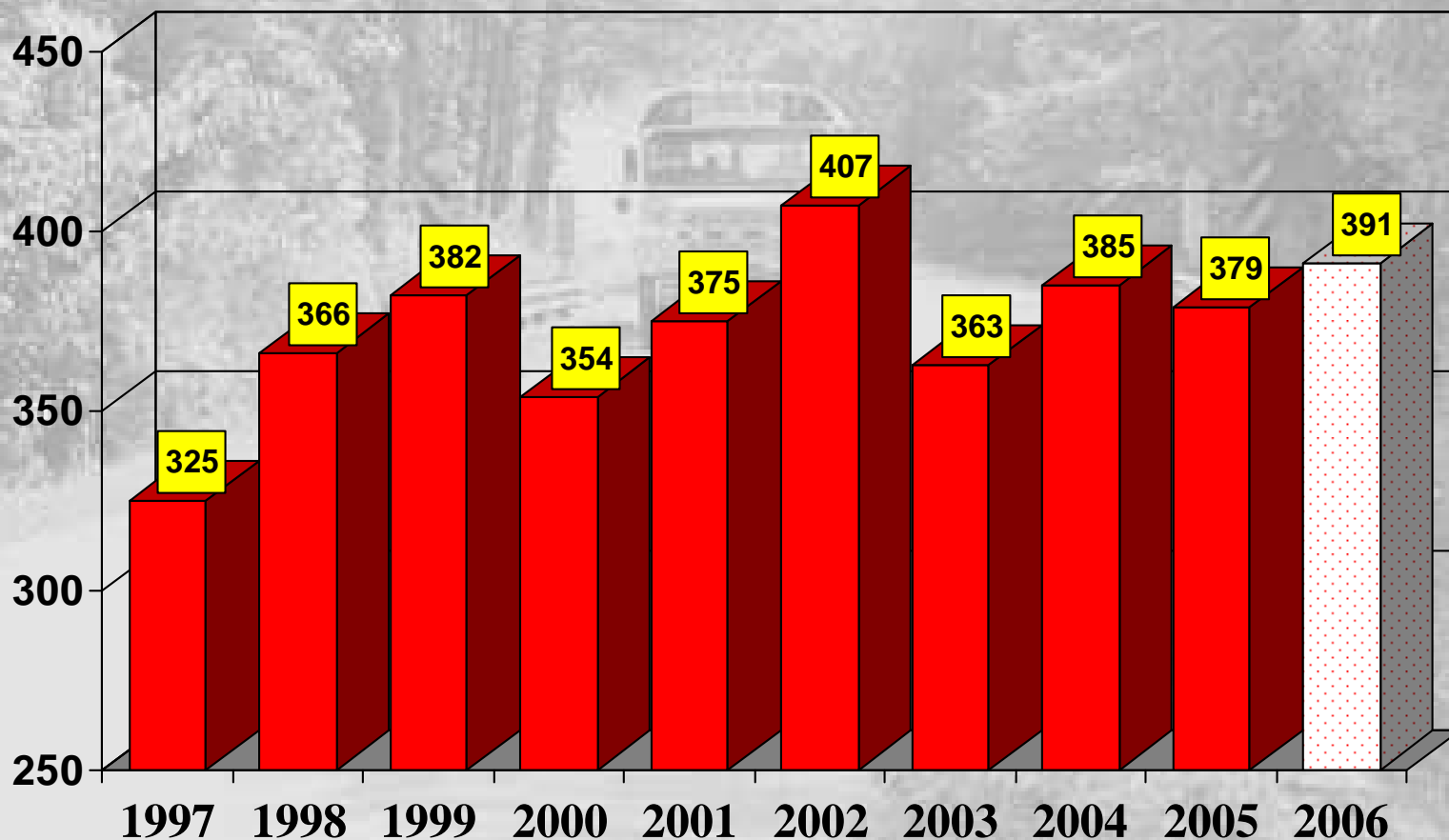
# South Carolina Interstate Median Crossover Crashes



2006 figure is preliminary

# South Carolina Traffic Fatalities

## Traffic Fatalities on Secondary Highways

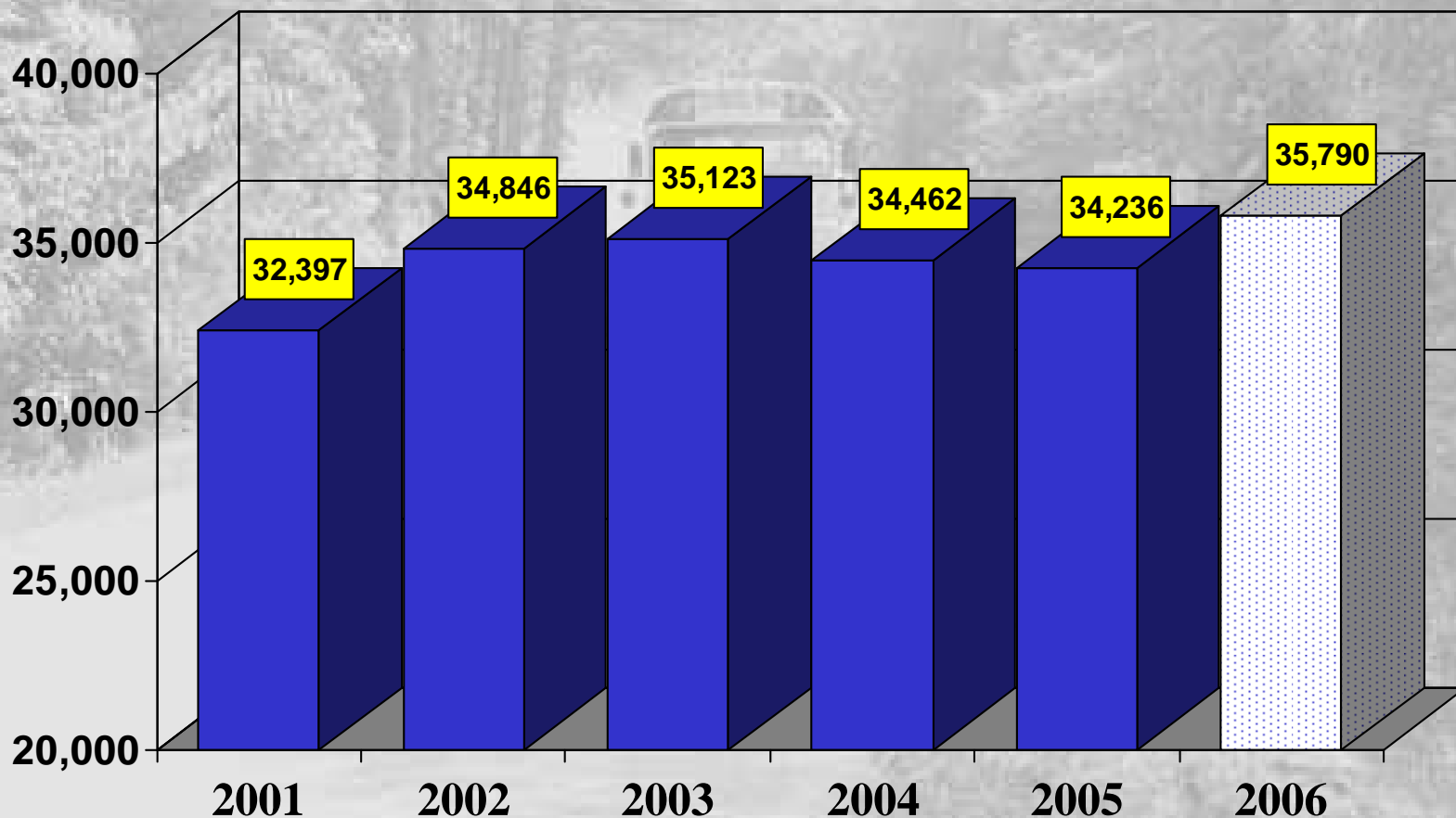


2006 figure is preliminary

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# South Carolina Traffic Fatalities

## Traffic Crashes on Secondary Highways

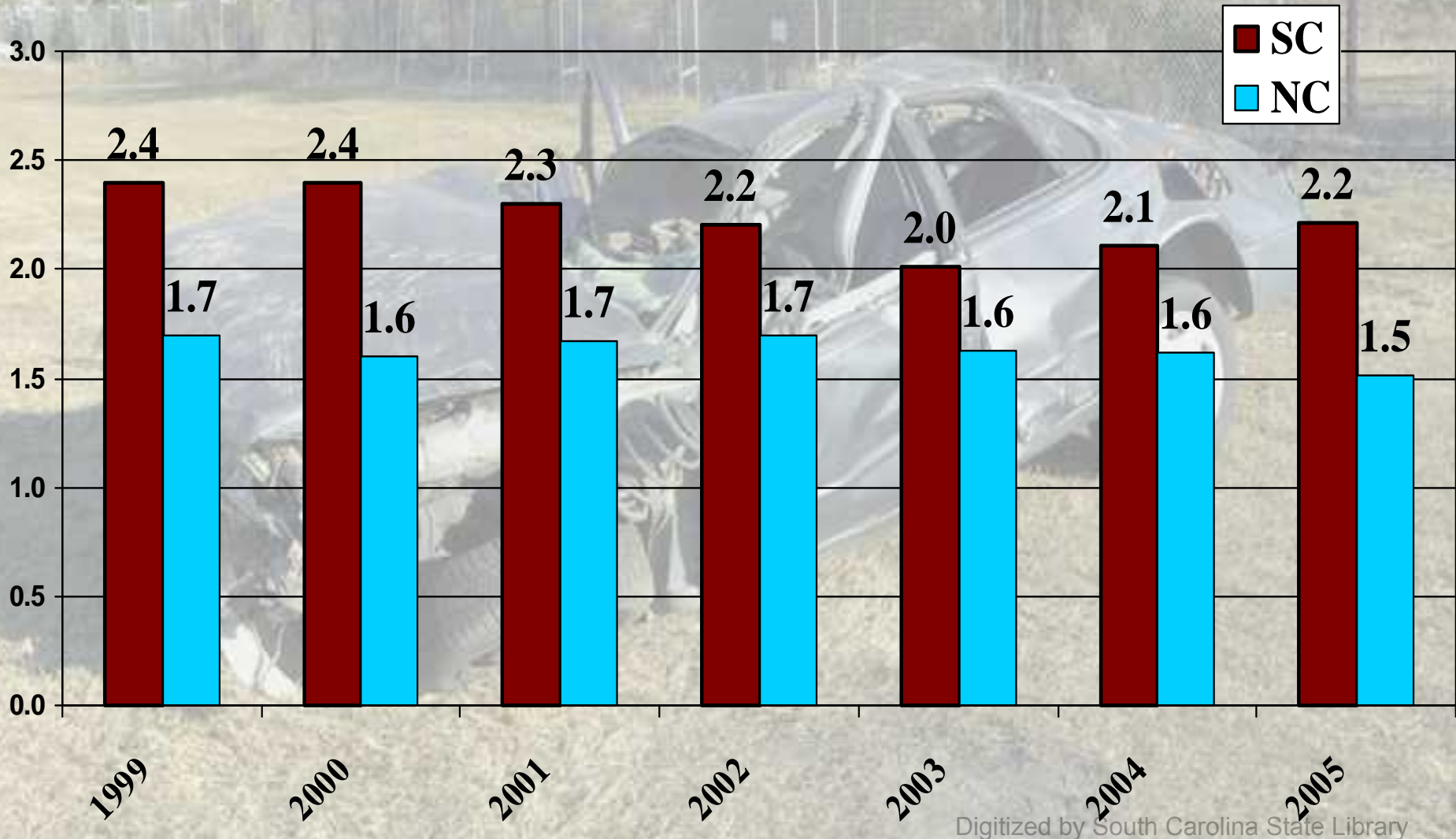


**2006 figure is preliminary**

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# South Carolina vs North Carolina

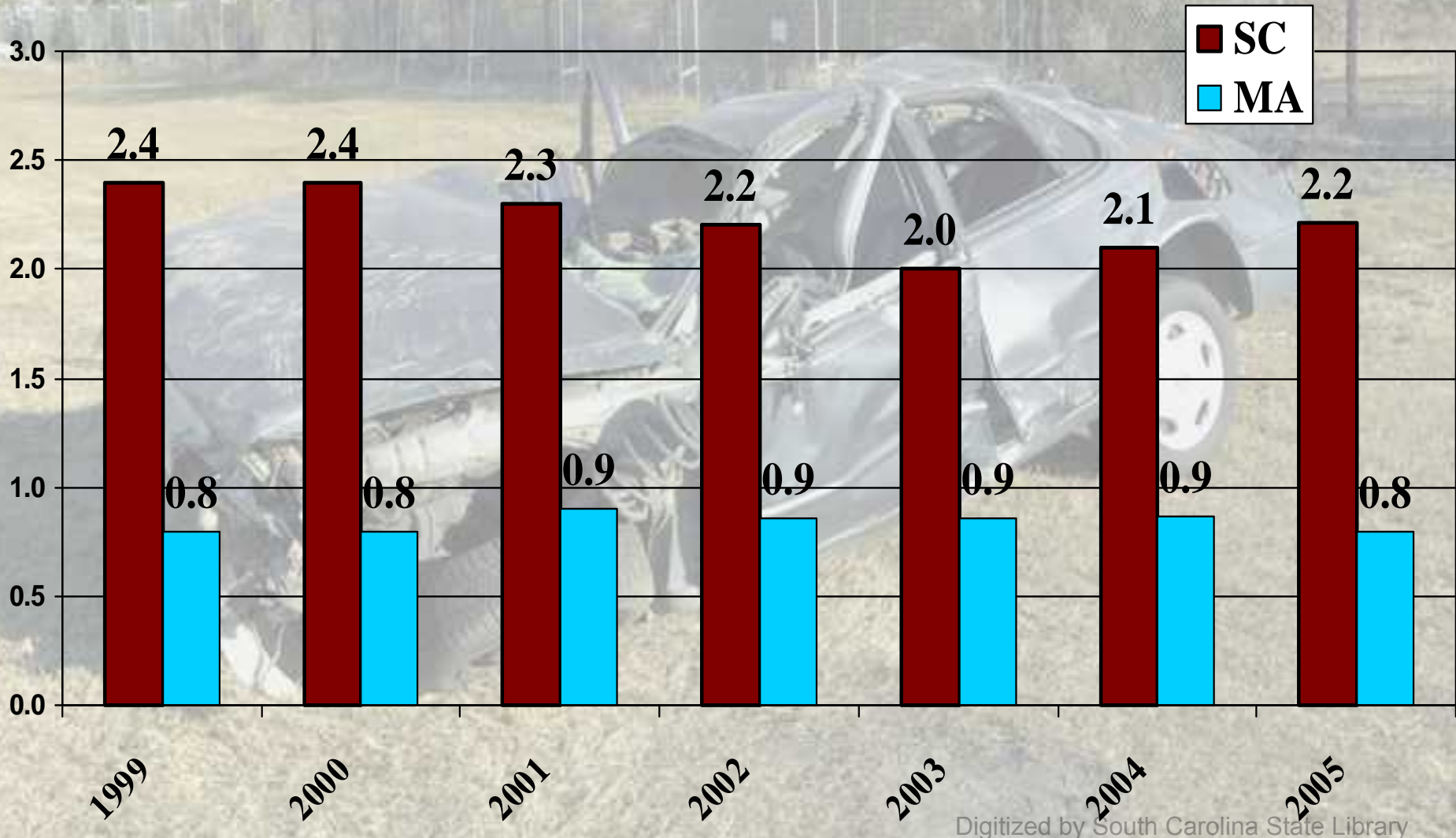
(Traffic Deaths per 100 million vehicle miles traveled)





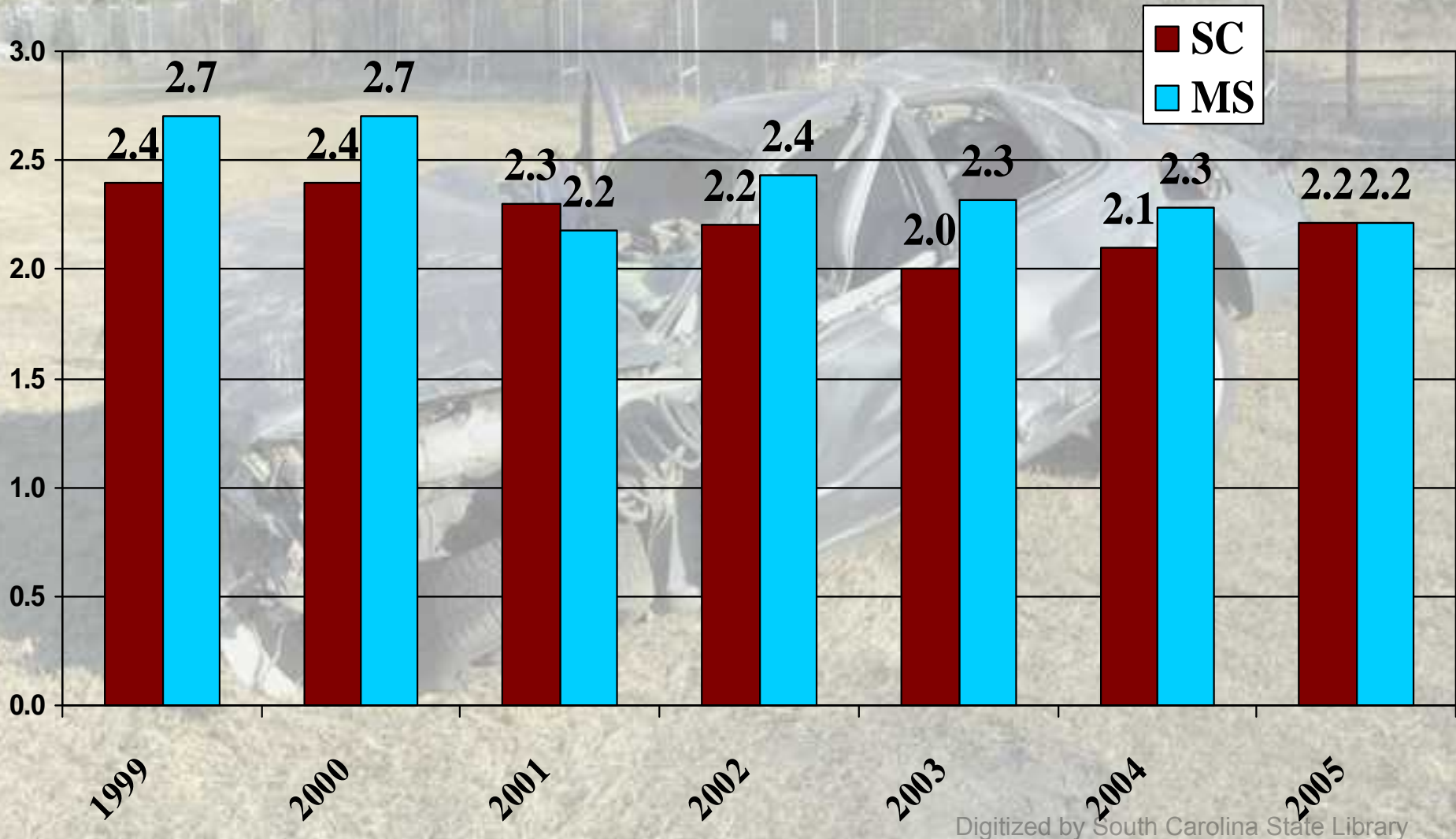
# South Carolina vs Massachusetts

(Traffic Deaths per 100 million vehicle miles traveled)



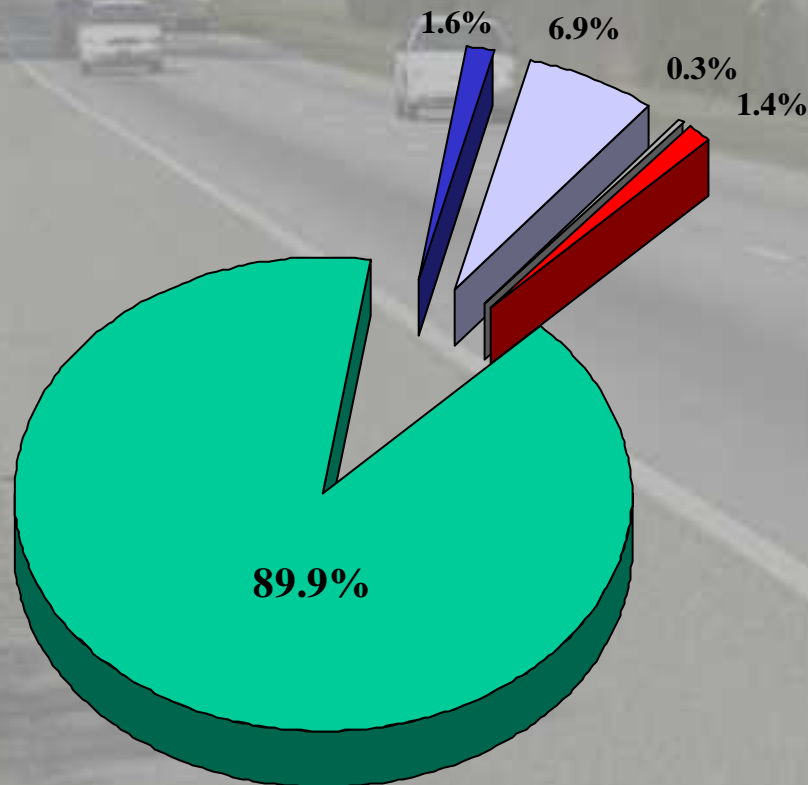
# South Carolina vs Mississippi

(Traffic Deaths per 100 million vehicle miles traveled)



# South Carolina Traffic Trends

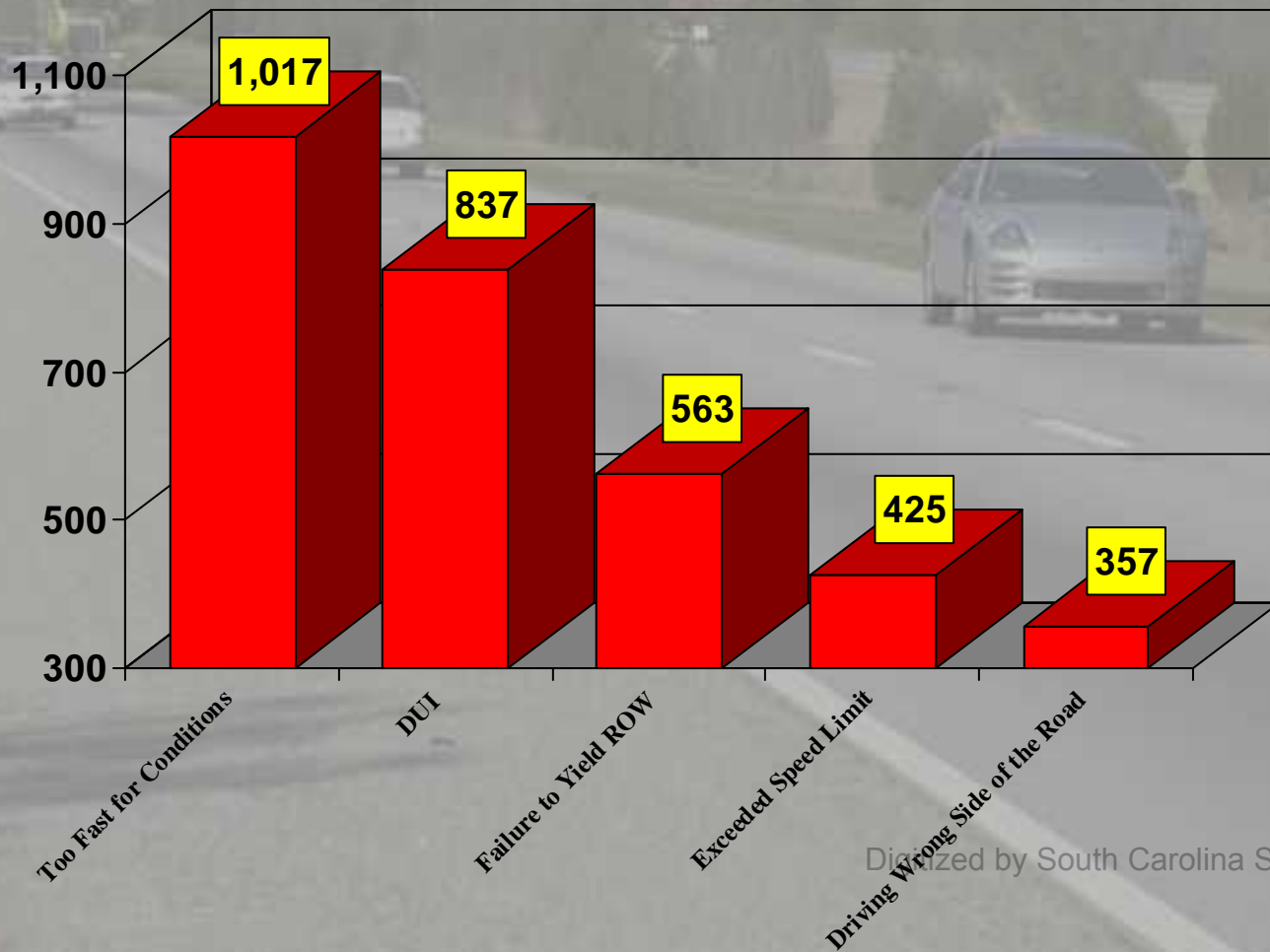
## Fatality Probable Cause Categories 2001 - 2005



<span style="color: #00FF99;">■</span>	Driver - 4,694
<span style="color: #0000FF;">■</span>	Environment - 83
<span style="color: #CCCCFF;">■</span>	Pedestrian/Cyclist/Passenger - 358
<span style="color: #999999;">■</span>	Road - 14
<span style="color: #FF0000;">■</span>	Vehicle - 74

# South Carolina Traffic Trends

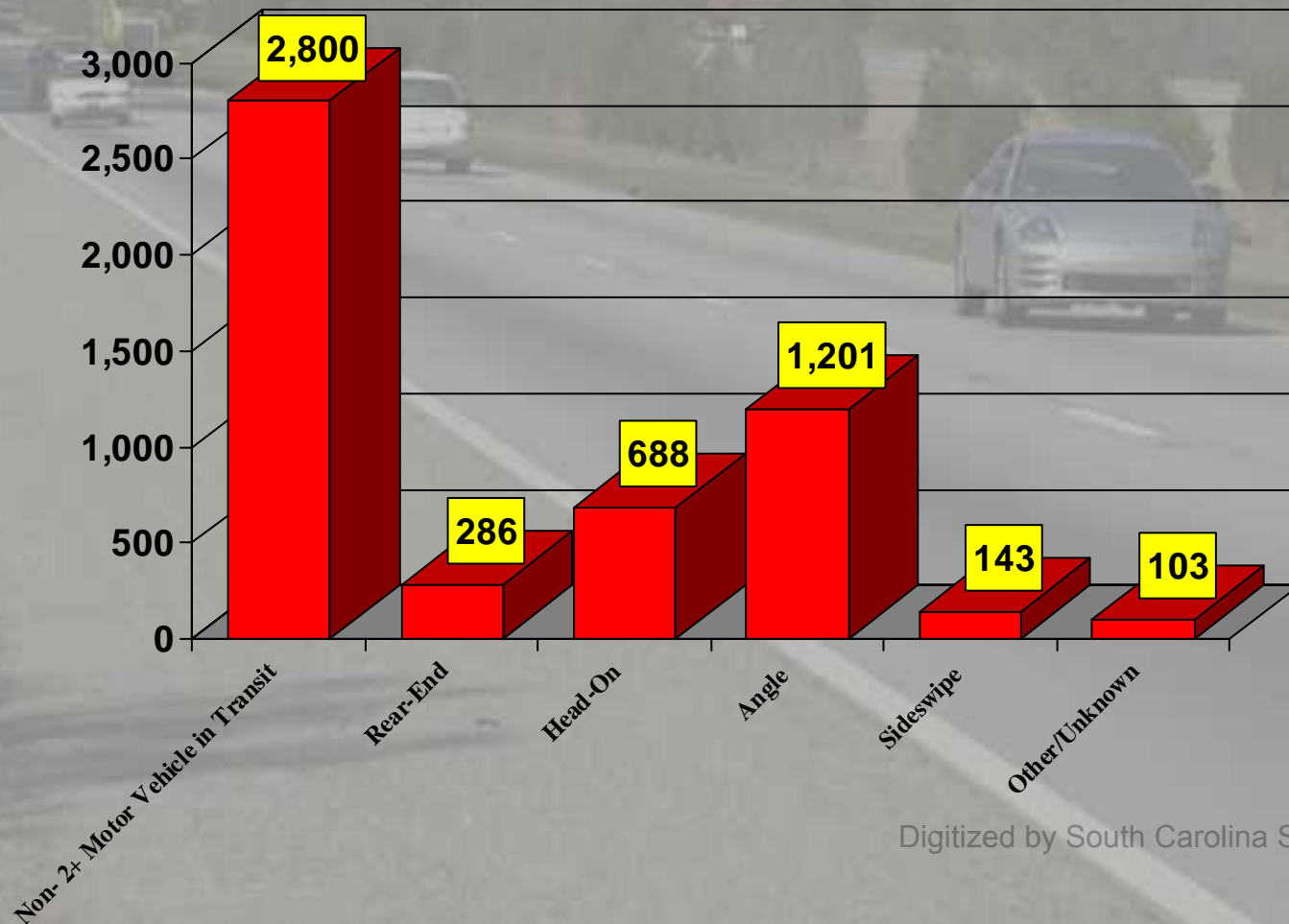
## Traffic Fatalities - Leading Probable Causes 2001 - 2005





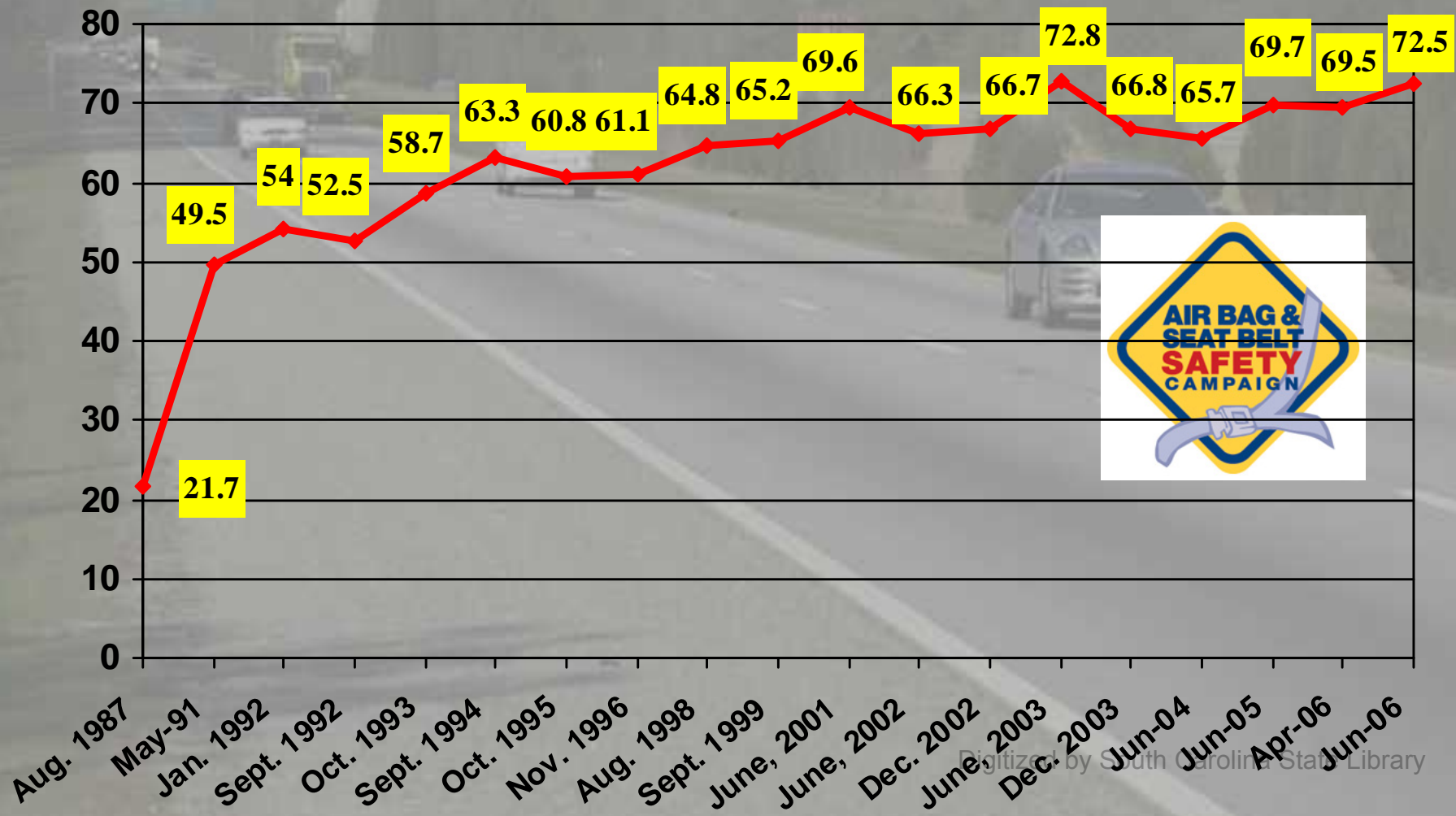
# South Carolina Traffic Trends

## Traffic Fatalities – by Manner of Collision 2001 - 2005



# South Carolina Traffic Trends

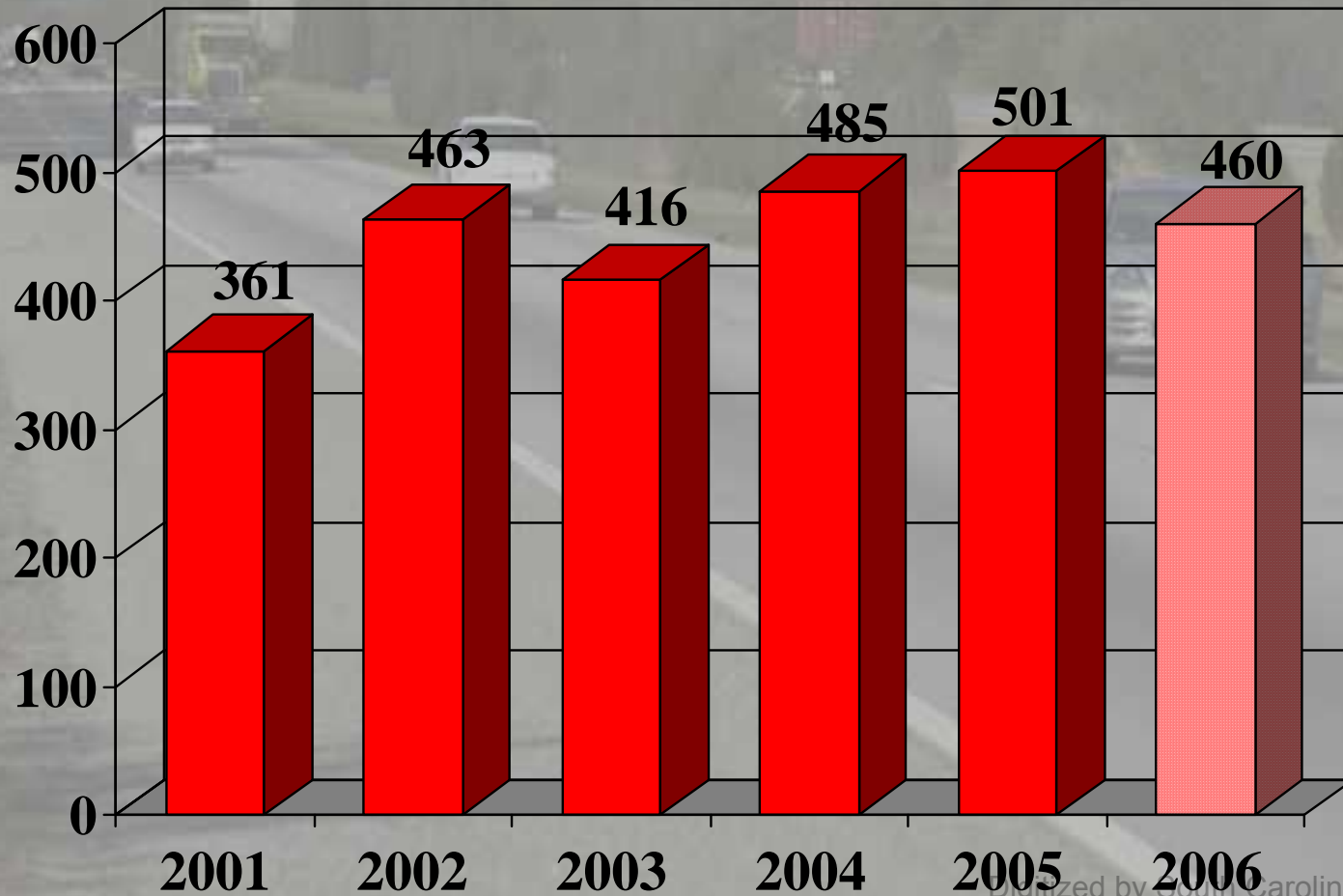
## Restraint Utilization





# South Carolina Traffic Trends

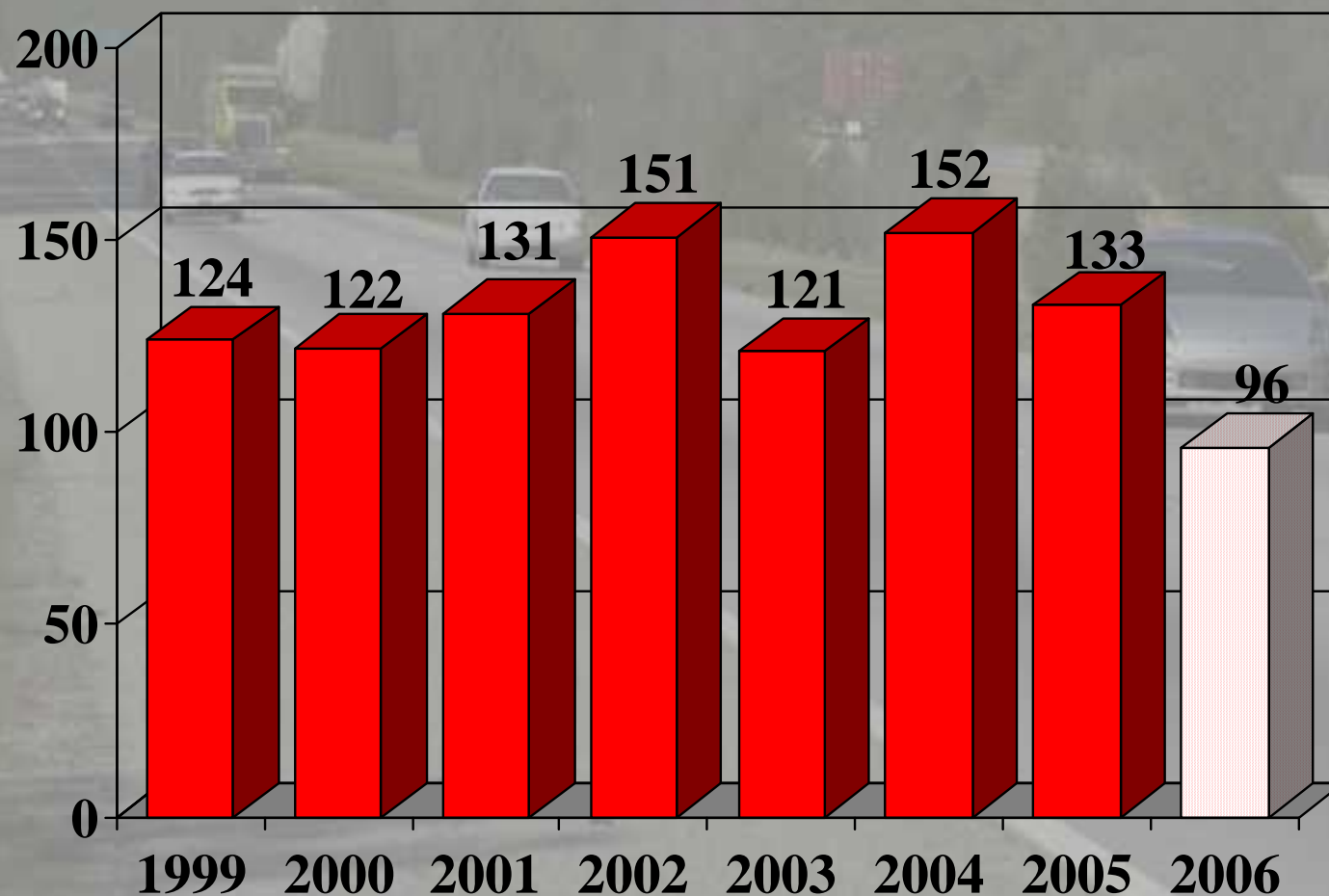
## Run-Off-Road Fatalities



2006 figure is preliminary

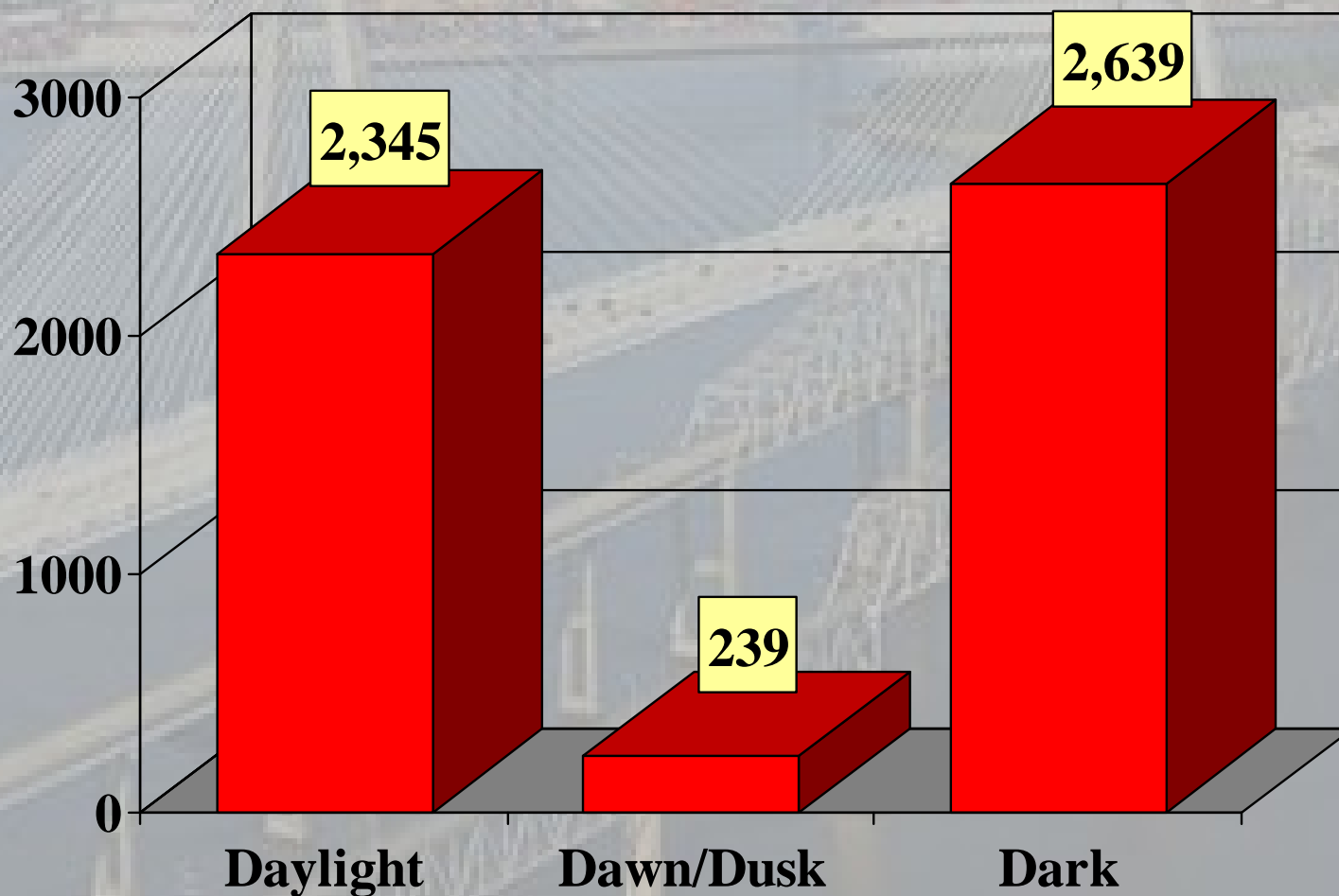
# South Carolina Traffic Trends

## Head-on Traffic Fatalities

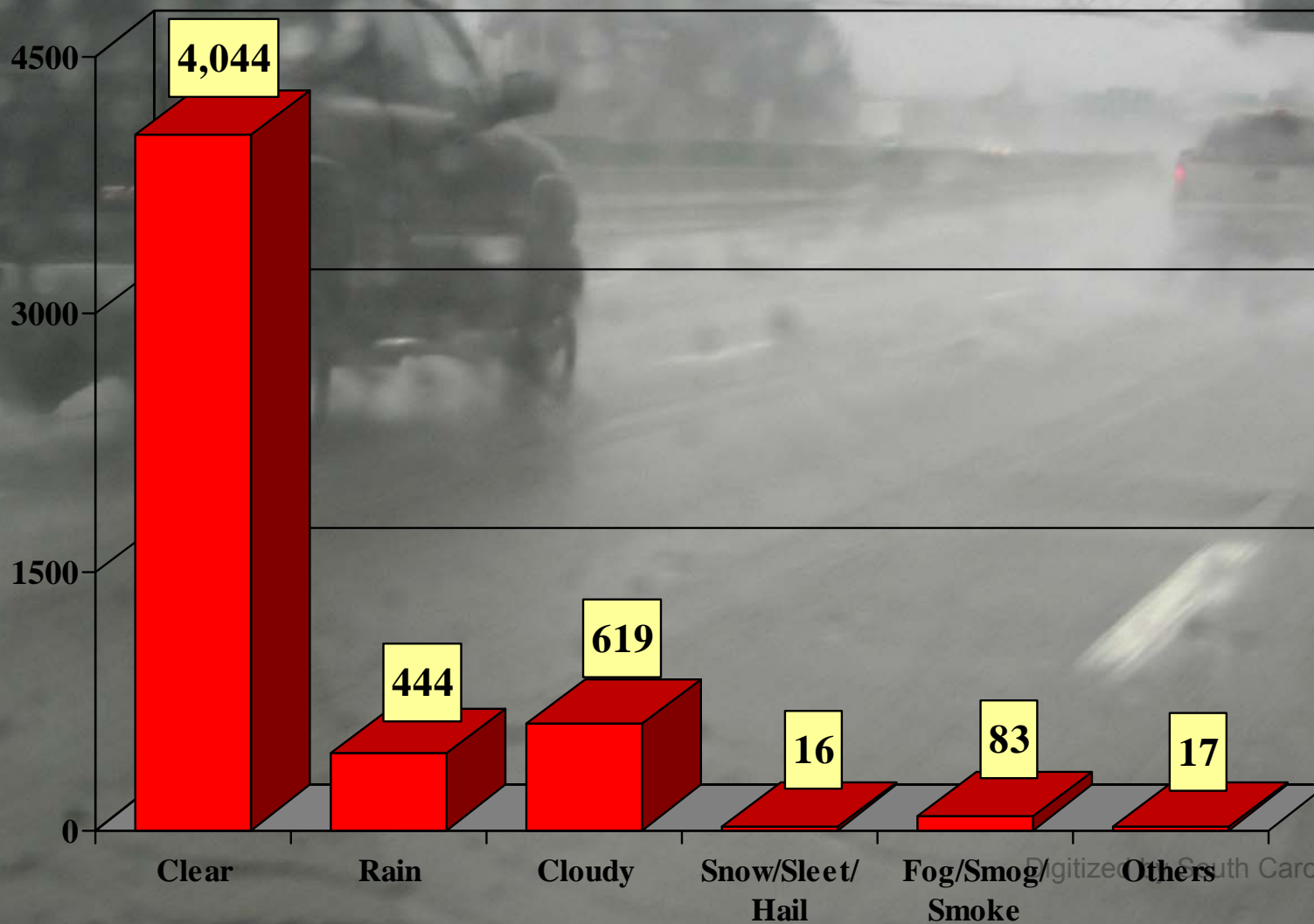


2006 figure is preliminary

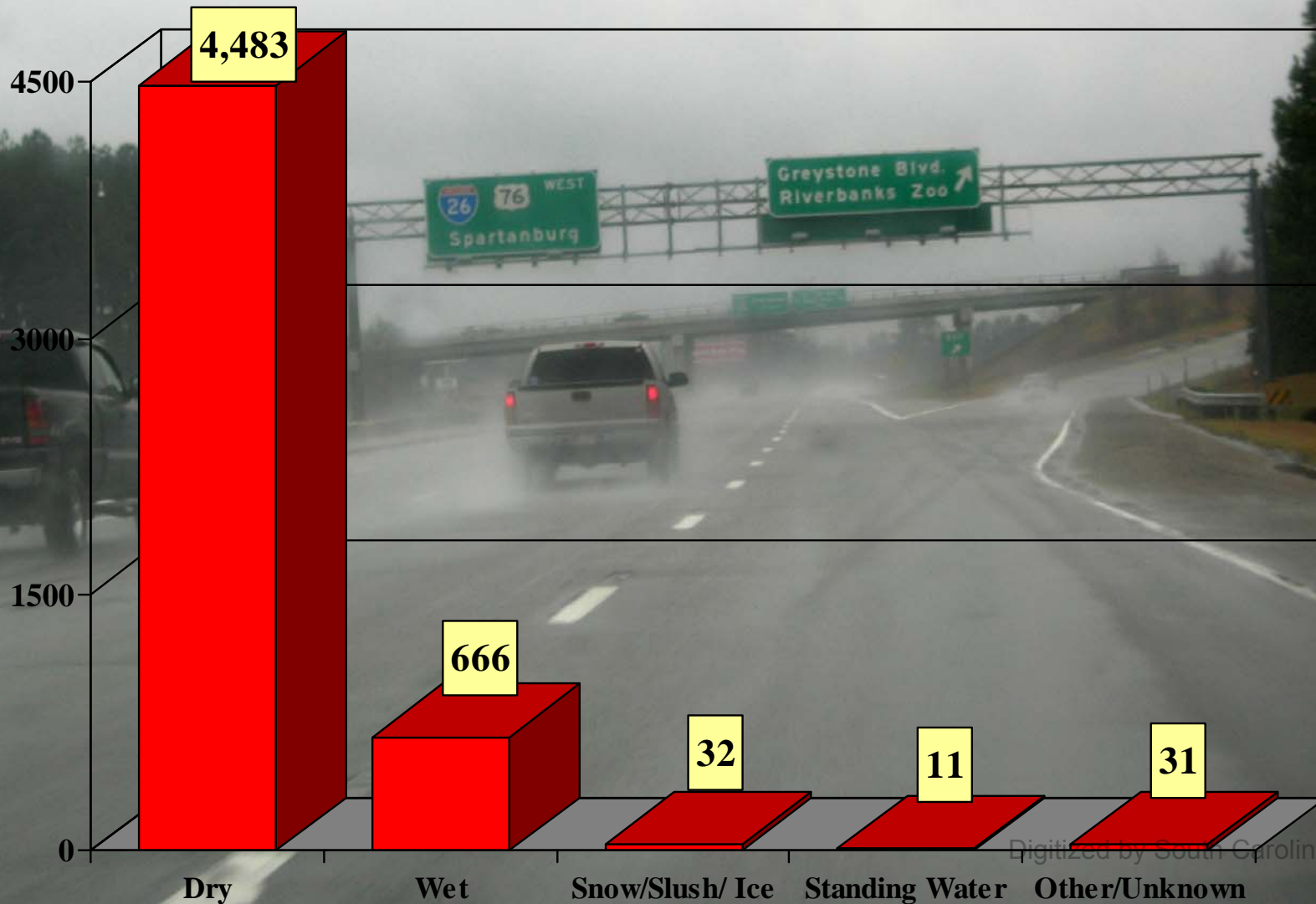
# Traffic Fatalities by Lighting Conditions 2001 - 2005



# Traffic Fatalities by Weather Conditions 2001 - 2005



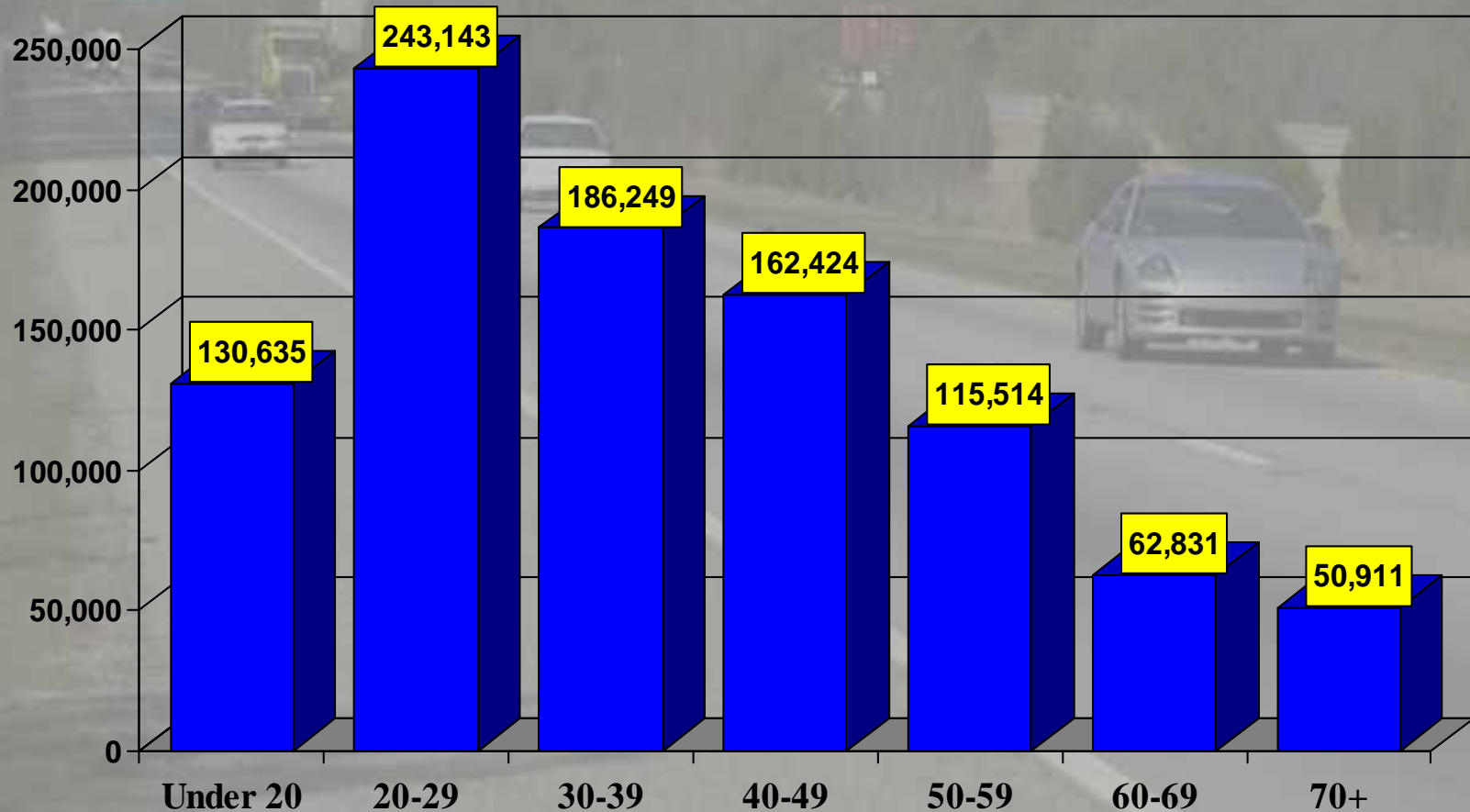
# Traffic Fatalities by Road Surface Conditions 2001 - 2005



# South Carolina Traffic Trends

## Age of Drivers in All Traffic Crashes

2001 - 2005

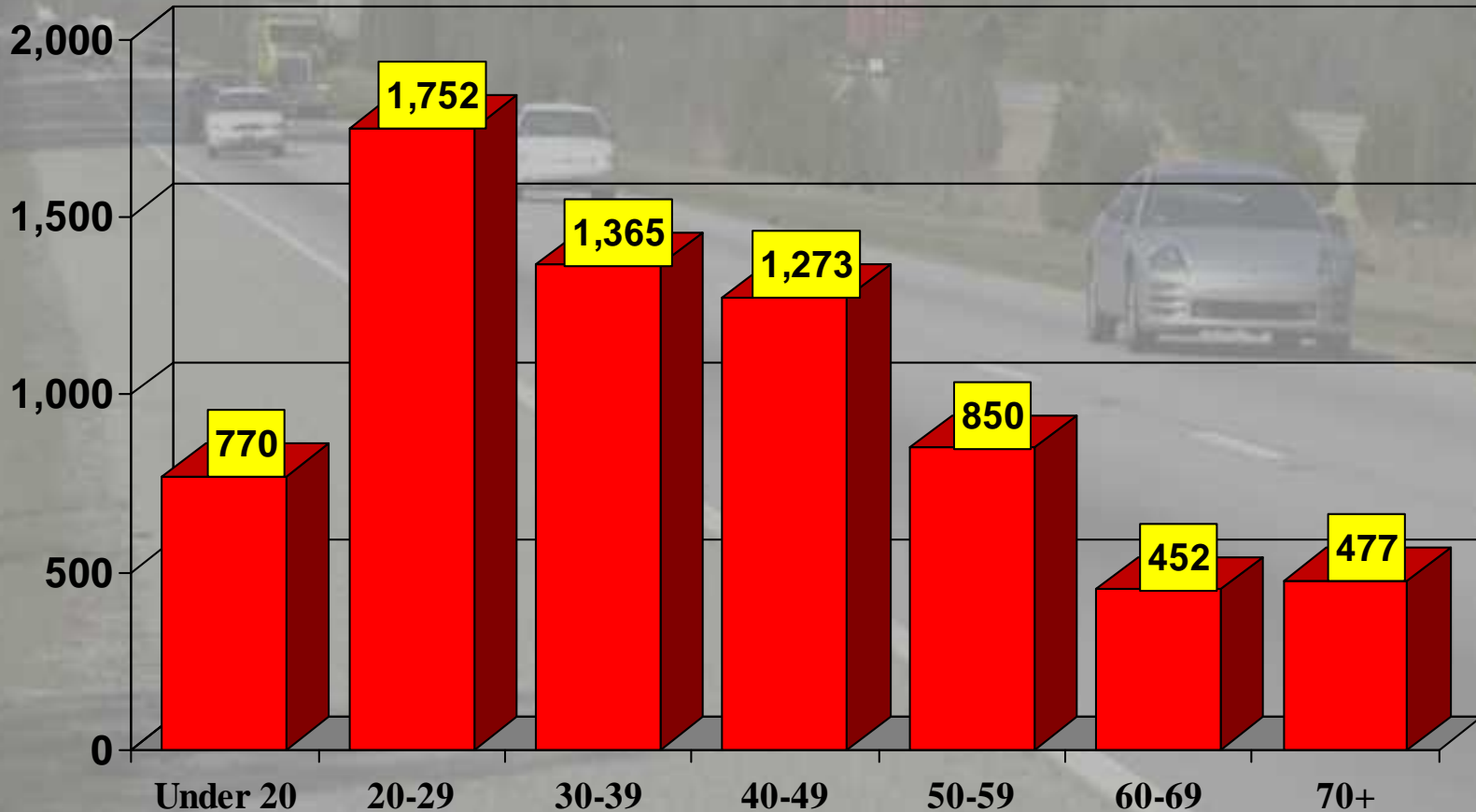


Graph does not include 48,577 drivers with unspecified ages. Excludes pedestrians



# South Carolina Traffic Trends

## Age of Drivers in Fatal Crashes 2001 - 2005



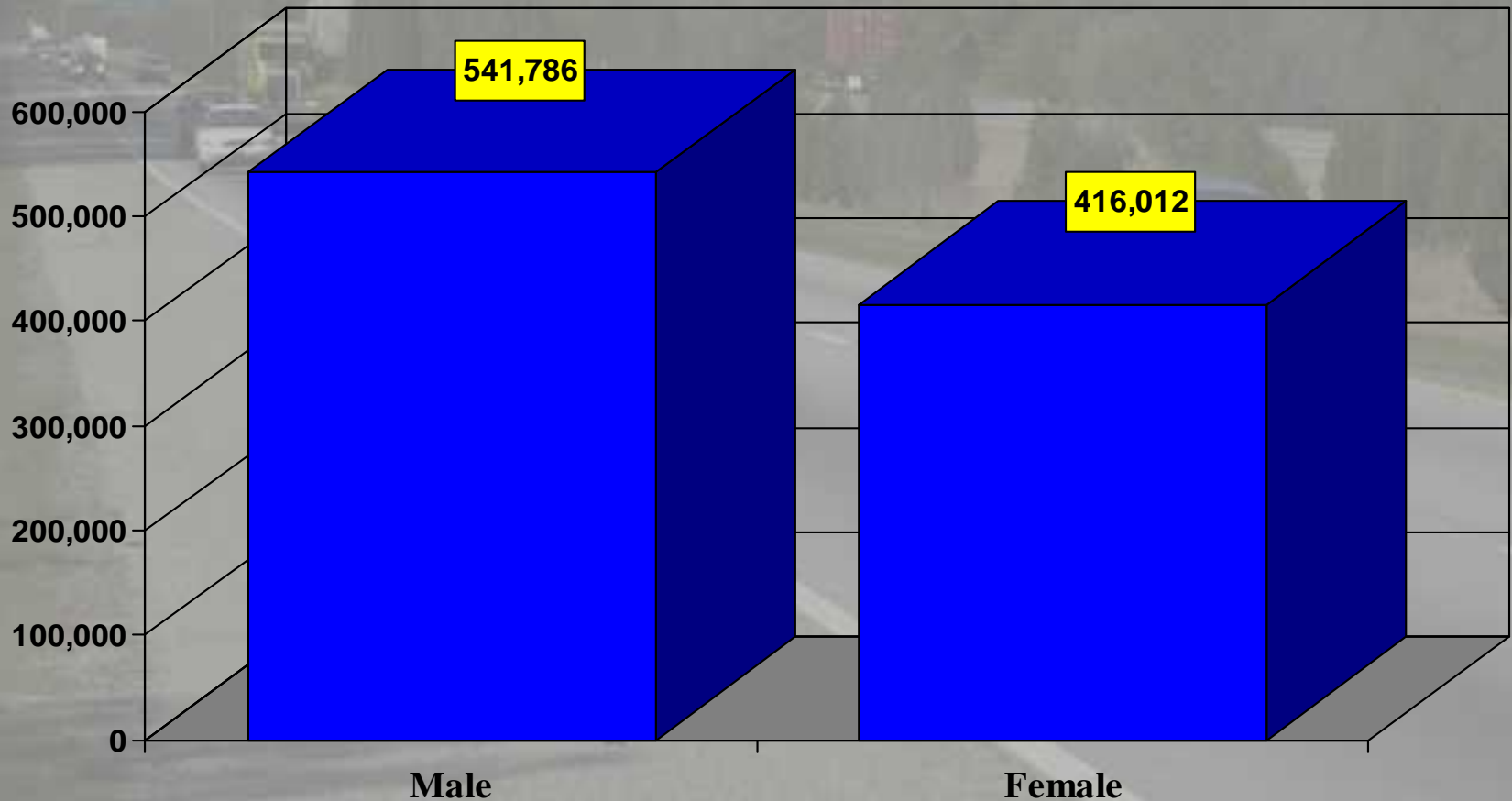
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Graph does not include 237 drivers with unspecified ages.  
Excludes pedestrians

# South Carolina Traffic Trends

## Sex of Drivers in All Crashes

2001 - 2005

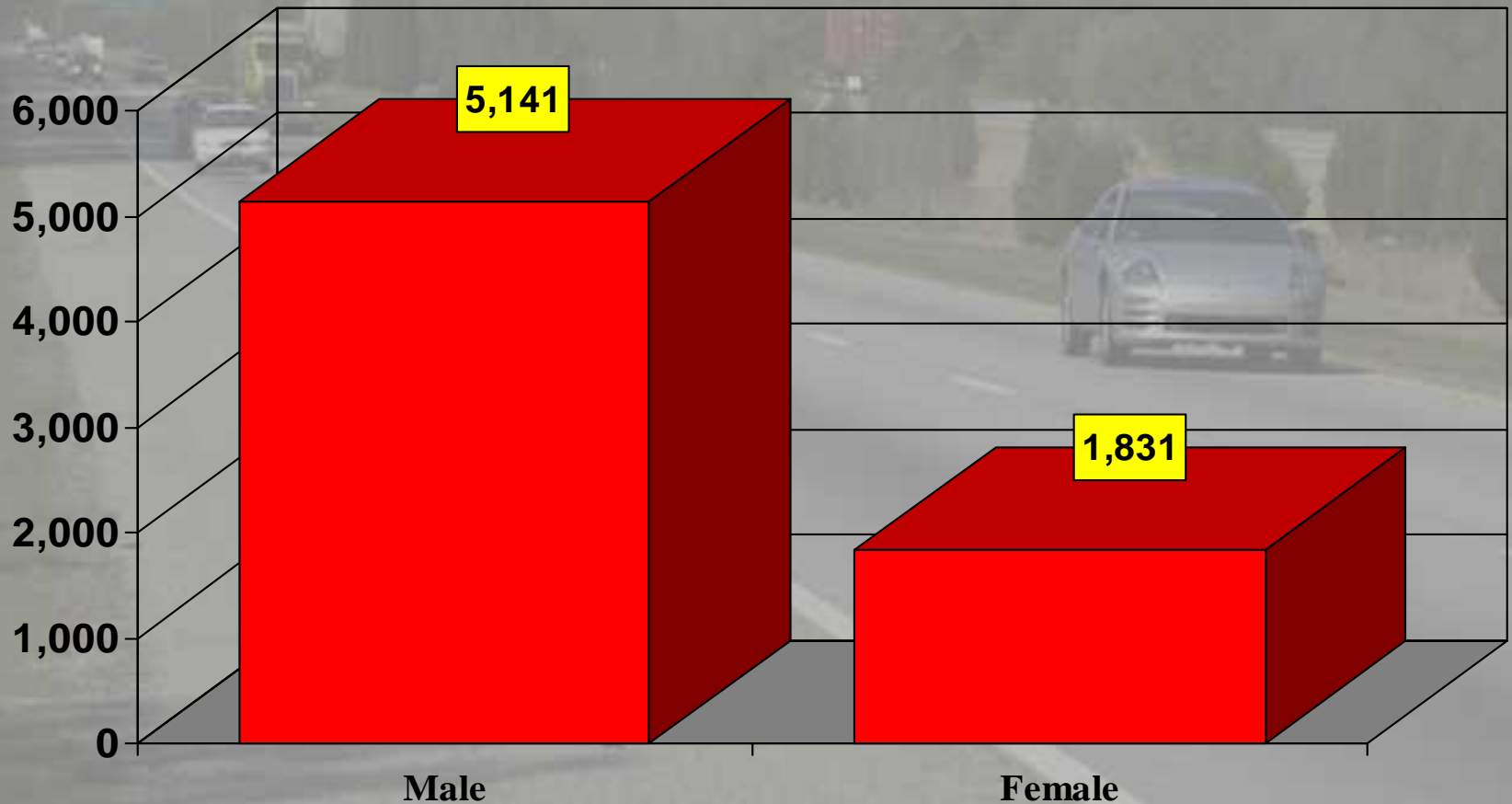


Excludes Pedestrians and "unknown" gender. All other vehicle operators included.

# South Carolina Traffic Trends

## Sex of Drivers in Fatal Crashes

2001 - 2005



Excludes Pedestrians and "unknown" gender. All other vehicle operators included.

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# South Carolina Traffic Trends

## Traffic Fatalities



2005 Figure is Preliminary

# South Carolina Traffic Fatality Trend

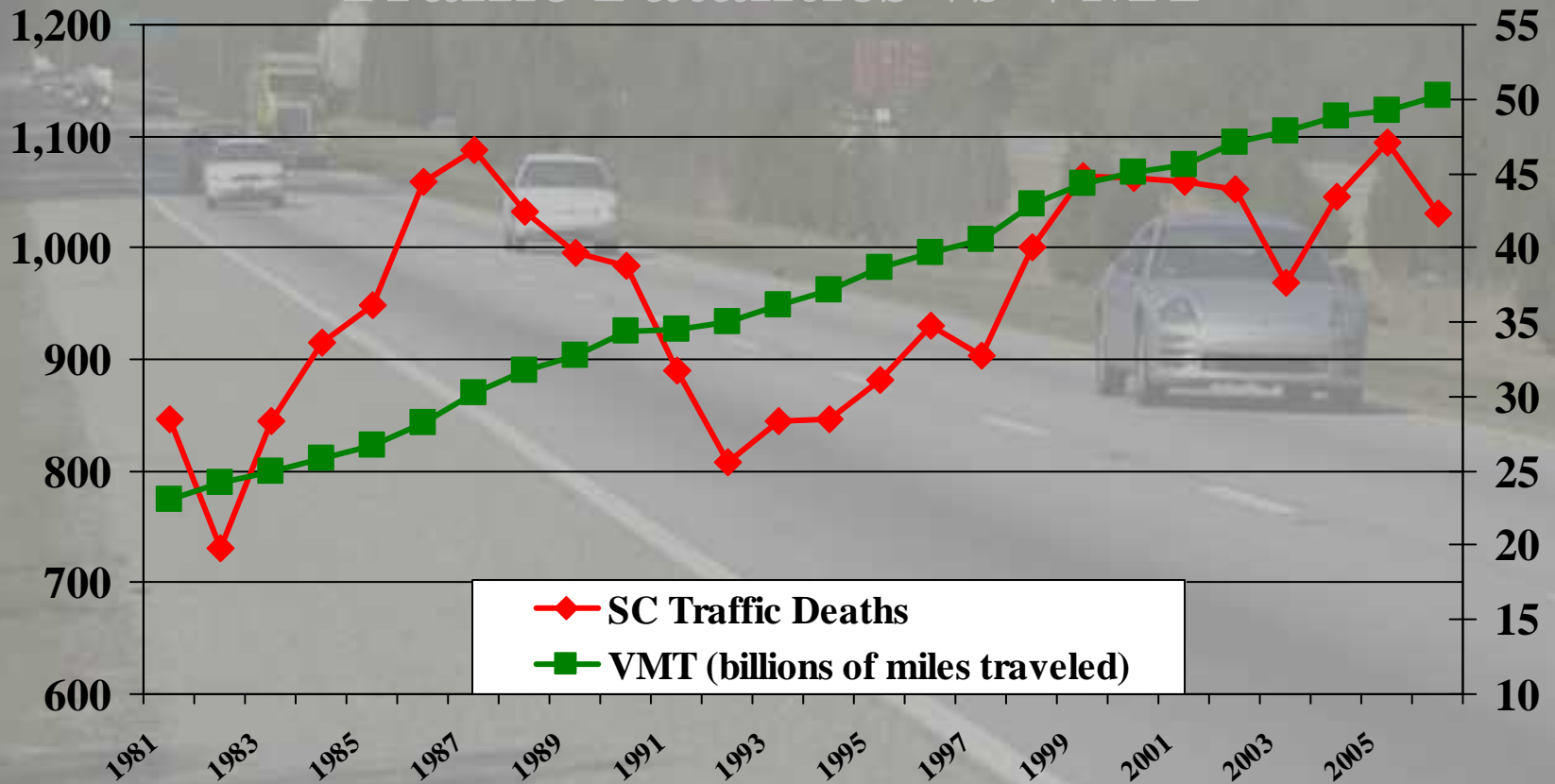
Is it Random?

Or

Is there Something That Explains the  
Pattern?

# Perhaps Fatalities Fluctuate Based on Travel Volume

## Traffic Fatalities vs VMT

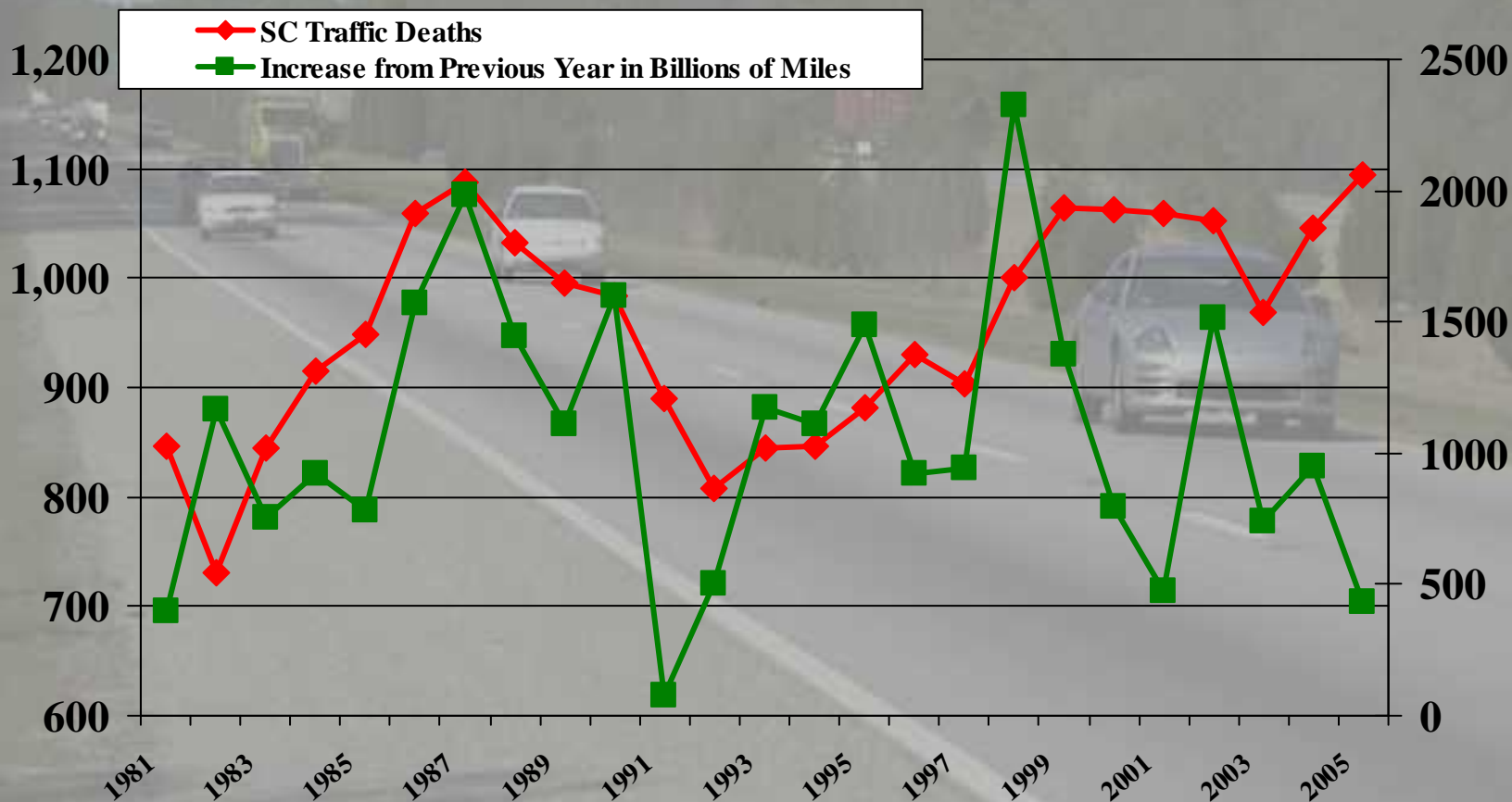


Source: SCDPS



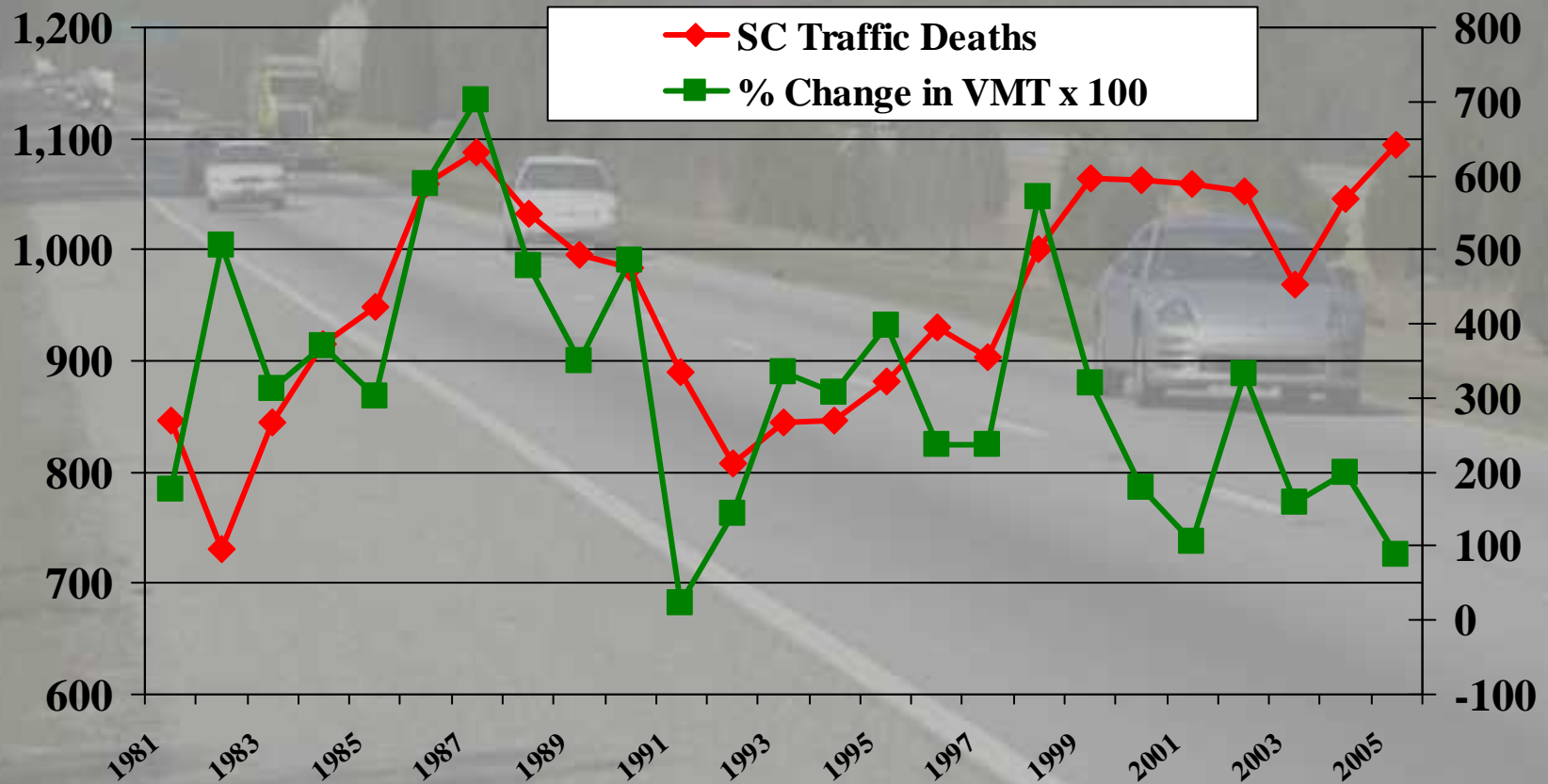
# Or the Growth in Travel

## Traffic Fatalities vs Increase in VMT



Source: SCDPS

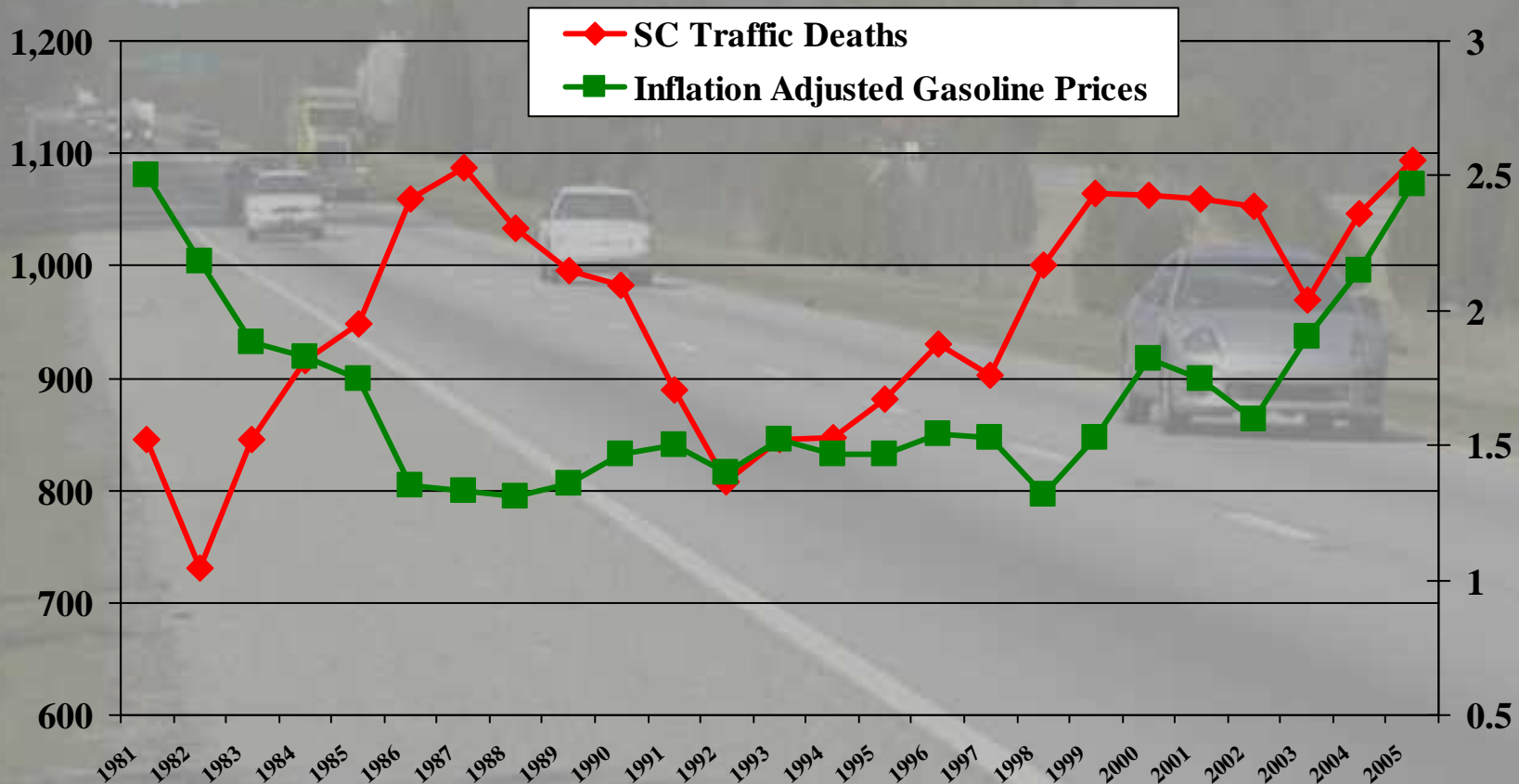
# Or the Percentage Increase in Travel Traffic Fatalities vs % Increase in VMT



Source: SCDPS

# Perhaps Gasoline Prices Hold the Key

## Traffic Fatalities vs Gasoline Prices



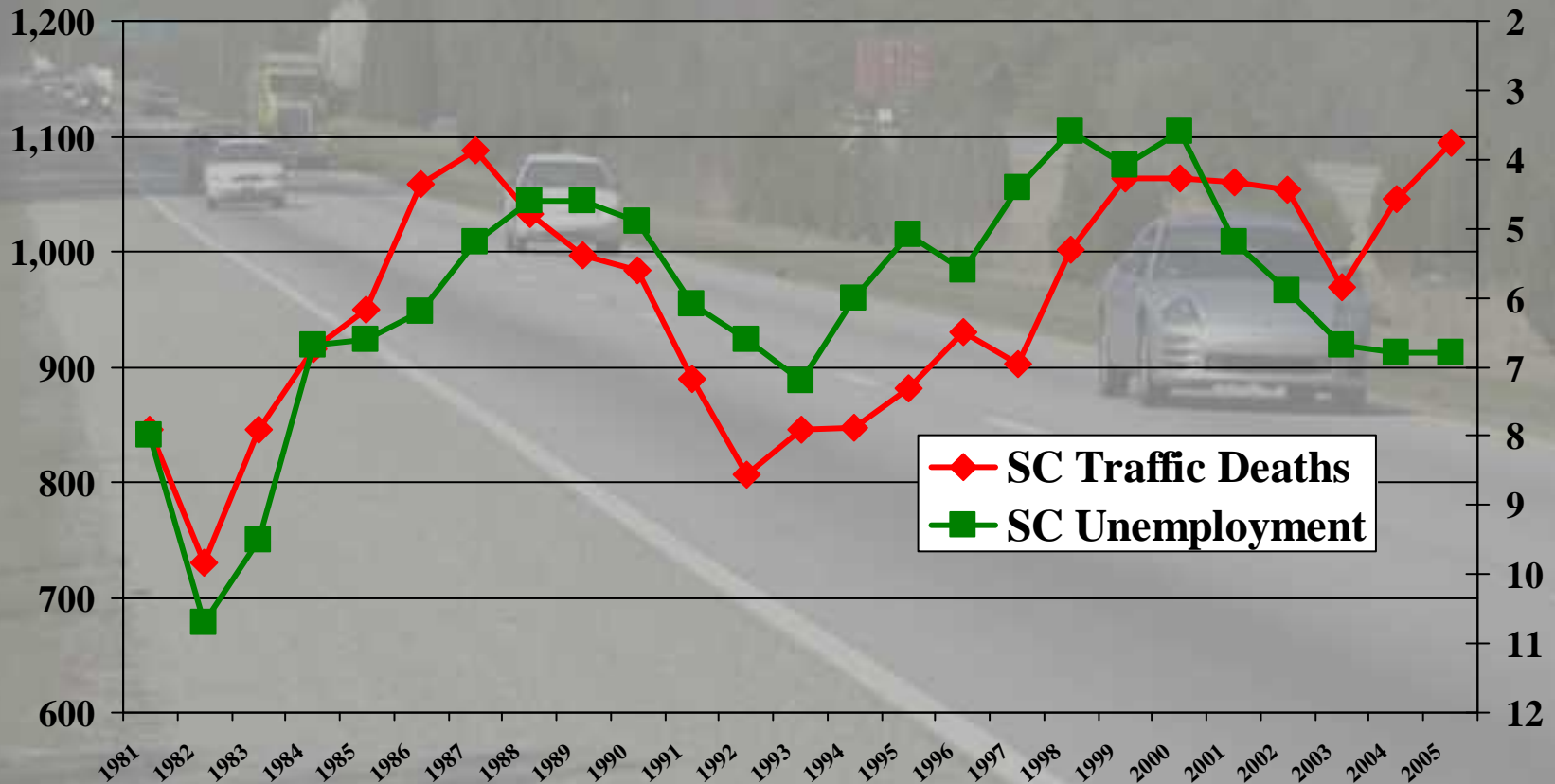
Source: SCDPS

US Labor Department

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# Or Is It the State Economy

## Traffic Fatalities vs Annual SC Unemployment



Source: SCDPS

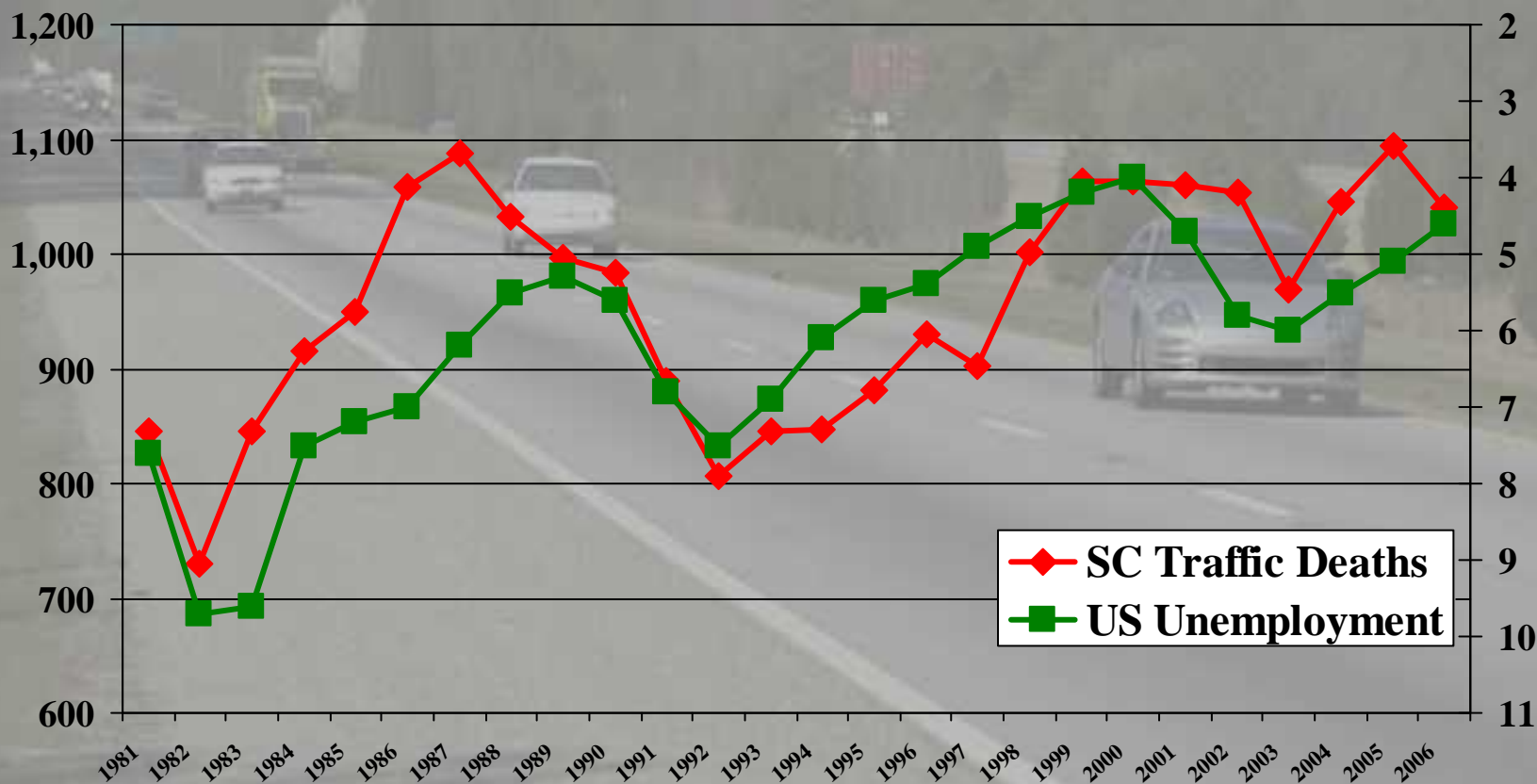
US Labor Department

For every 1% drop in the S.C. unemployment rate the number of traffic deaths in SC increases by 40 per year.

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# Or the National Economy

## Traffic Fatalities vs US Unemployment

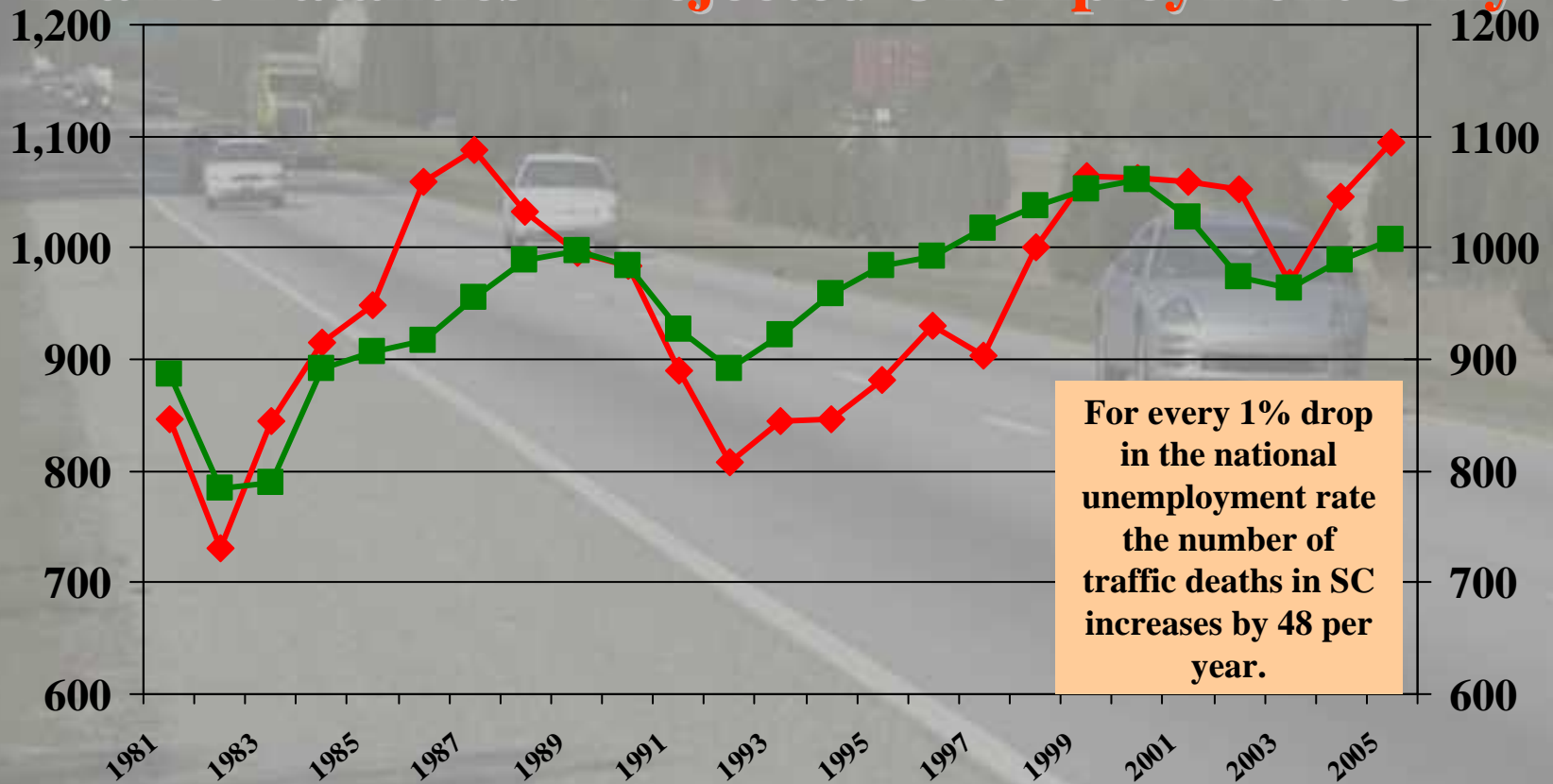


Source: SCDPS

US Labor Department

# The National Economy, as Represented by the National Unemployment Rate, Explains Nearly Half the Change in the SC Traffic Death Toll

## Traffic Fatalities - Projected Unemployment Only



2005 Figure is Preliminary





**Other Factors Do Not Seem**

**Very Important, But Why??**